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DOCTOR WHO

WARRIORS GATE

IN·VISION

THE MAKING OF A TELEVISION DRAMA SERIES

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CASIS screamed. The shrill noise echoed throughout the mansion's multitude of rooms, causing the slaves to stop their chores and frown at each other. In the nursery, the litter awoke; four extra yells were added to the cacophany.

Within seconds, Anzlor was at his mate's side, his initial concern transformed into anxiety by the mask of horror that Casis wore: her eyes were wide and unfocussed, the nails of her paws digging into her beard and causing drops of crimson to splatter on her beige tunic.

'The visions?' It was a rhetorical question: what else but Casis' nightmare glimpses along the timelines could have produced such a sound?

The female Tharil seemed to relax at the sound of her mate's voice, but it was the relaxation of a punctured balloon. She took her paw from her chin and grasped her husband's. 'I saw it again, Anzlor. The void. A great nothingness that will consume our people!'

Anzlor shook his head and squeezed Casis' paw. As far as his fellow Tharils were concerned, he was backward, his time-sense limited to a span of only a few hours. His mate, on the other hand, was a paramount time-sensitive, with a range that could be measured in decades, if not centuries. So what was so frightening that it had woken Casis up night after night for the last four weeks, and was now threatening to disrupt her waking hours? 'Have you visited the apothecary?'

She shook her head, her mane scintillating in the light from the wall-mounted flambeaux. 'To what end? For pills and potions and homespun advice?' She chewed her bottom lip, clearly trying to decide whether she should speak.

'Tell me, Casis.'

Her eyes looked downwards. 'I have farspoken the Hierophant.' As Anzlor made to rise, Casis held him down. 'I knew you'd take it like that.'

'But the Hierophant, woman! What do you think you're playing at?'

'My dreams show our Empire falling in blood and flame, our glory buried under a white void.' She looked round at her mate. 'Is that to be the end of the Tharils? All of this -' she waved around the richly furnished chamber, '- destroyed?' But the question carried the weight of finality. 'Perhaps the Hierophant can interpret these nightmares.'

Anzlor hugged her tightly. 'The Tharils have ruled for millennia. We control hundreds and thousands of worlds on both sides of the gateway.

'There is no-one to oppose us, Casis.'

'Quickly!' Tarook ushered them into his house with urgent flicks of his hand. As the last of his visitors entered, he looked up and down the street, ensuring that no-one - either the Tharil Lords or their militia - had observed the clandestine meeting.

Closing the door behind him, he studied the people who sat in his living room: Oolak and Patrice, the technobiologists; Geren the geneticist; Plusca the temporal scientist; and Yven and Trawq - the roboticists.

'This is to be our last meeting. The Overlords are becoming suspicious.' Tarook ran his hand through his thinning pate. 'And well they might.' He turned to Yven. 'How close are we?'

Yven - a delicate red-head and cybernetics genius - smiled. 'We're there.' She touched a small holographic projector in her hand. Its beam shot out and resolved in the centre of the room.

'This is it, Tarook. A Gundan.' The transparent figure looked like an ancient suit of armour, reddish-brown and formidable, its intent hidden beneath its impassive helmet.

'Immune to the time winds,' stated Plusca, his boyish face alight with enthusiasm. 'I've bonded a layer of adulterated dichronomide pentafluorate to the surface.'

'And its weaponry?'

Oolak stood up and stabbed a bony finger into the hologram. 'The axe is coated with a toxin tailored to Tharil physiognomy: and the toxin is self-replicating in the shaft of the axe.' He nodded at the albino man on the edge of the sofa. 'You can thank Geren for that.'

'Excellent.' Tarook circled the hologram, trying to contain his excitement. The final solution: the fall of the Tharils' tyranny was encapsulated before him in a bronze suit of armour. 'How soon can we put them into mass production? Computer interpolations say that we need at least five hundred thousand Gundan on the first strike.'

'Not a problem.' Yven tapped the projector again, and the Gundan was replaced by the image of an industrial complex. 'This is Belactron. It lies just outside the neutral zone. I've managed to arrange a deal: they've turned over their entire production to Gundan.' She smiled sheepishly. 'I'm afraid we had to act quickly - there wasn't any time to contact you.'

'I'll forgive you. How long before we have enough?'

'We'll have half a million Gundan within two months, all of them programmed to attack from the moment they leave the assembly line.'

'But can we take the attack to the Tharils?' This was the key. 'Can we mount an assault on the Tharil Homeworld?'

Plusca nodded, and held up a small white sphere. 'This is - will be - implanted in every Gundan.'

'And?' Tarook was impatient.

'And, Tarook, the Gundan are capable of locating and entering the Tharil gateways. The Gundan can take the battle to the Overlords themselves.'

'And I have it on good authority that others are quite willing to follow up the Gundan attacks,' added Patrice. 'For millennia the Tharils have used their time-sensitivity to control and dominate. But that time-sensitivity can be harnessed... enslaved.' He gave a sinister grin. 'Ironic, don't you think? The Tharils enslaved by their own majesty?'

Then the door exploded.

As the militia burst in and killed the assembly with random bursts from their energy weapons, Tarook's last thought was one of triumph. *They're coming off the production line. Nothing in the world can stop them now...*

'Quickly!' shouted Garoth. His sister and two brothers were only yards behind him. But the three Privateers were only yards behind them. 'Down!'

Garoth hurled the silver sphere above his litter's heads, directly in the path of the grey suited and black helmeted hunters. The globe shattered. The briefest breeze from the time winds ruffled the Privateers' hair... and ripped their faces off as they aged to death. Garoth didn't spare them a second's glance.

'In here!' He waved them into in dark room and slammed the door behind them.

'Where are we?' Clinth peered into the darkness, and drew back as Garoth switched a torch on, bumbing into Saqlin with a yelp.

The room was cramped and damp, mouldy brick walls and a low ceiling. 'This is one of the safe houses that the Antonine Killers have maintained.'

'The Antonine Killers?' hissed Peruth. 'But they're mercenaries!'

'They are the only hope our people have left!' Garoth couldn't contain his anger. 'The Gundan have invaded our universe, enslaved our people...' He grabbed Peruth. 'Joining the Killers is our only hope!'

'Well put.' The Tharil was huge, like an animated brick wall. His face was scarred, with half his beard missing. His huge paw was clasped round a silver ovoid - a *jablecta*, the legendary weapon of the Antonine Killers - and he had emerged out of the darkness without a sound. 'I take it that you and your litter want to join our glorious cause?'

'It's our only choice, Peruth.' Garoth looked at the Tharil freedom fighter. 'Can we get away?'

'I can teleport us from here to our main base. But are you sure?'

Garoth's expression was set. 'Our parents are now slaves, tortured by the Gundan. What choice have we got?'

The Antonine Killer fingered his *jablecta*. 'Your choice. You can fight for freedom... or die like animals.' He growled. 'You've seen what the Privateers and the Gundan have done.'

There wasn't any choice. 'We're going.' Garoth stepped forward. The elder Tharil smiled, baring his pointed teeth, and tapped his belt.

The room was suddenly empty.

Cassis heard the hammering on the main gate but tried to ignore it, inching further and further back into the inglenook. She was frightened, but also relieved. Anzlor had died on the battlefields of Saint Jaraine's Fields, but Garoth, Clinth, Saqlin and Peruth and been led to freedom by Father Rickwan... Freedom! What freedom was there anymore? The Gundan had ripped the living heart from the Empire, and now the Privateers buzzed around its decaying carcass, stealing the survivors and forcing them into bondage. She remembered her visions, the visions that had stopped the exact second that the first Gundan had burst through the gateways. What good had they been? What could they do?

'Do nothing.'

Casis looked up. A Tharil stood before her, dressed in full court finery. 'Who...?'

'Do nothing, Casis. It is done.'

And then he vanished, leaving Casis with an overwhelming feeling of calm and optimism. And then, for the final time in her life, she saw the vision.

The void was the same as ever, but something else was there... the broken ruins of the Warriors' Gate. And the mysterious Tharil standing before it.

The axe fell, cleaving Casis' skull in a single blow.

Craig Hinton

RORVIK

Captain of the Bulk Freighter, Privateer, Rorvik runs the outfit with a charmless efficiency that betrays a previous career in the military. "I'll decide what we can and can't do" he declares, indicating that he is unwilling to compromise his command decisions even by discussing them. He motivates his lads by waving financial rewards before them; Failure means "a chunk out of everyone's bonus".

Whilst he is short-tempered (although never abusive) with his crew, he is wise enough to see them as an asset to be capitalised; when in a tight spot (and this one gets tighter and tighter) he will always ask them for input before making a decision.

This done, upon issuing an order, he will always let them in on the reasons for it. His pride in his crew is evident as he tells the Romana that "there's nothing these boys can't do when they put their minds to it".

His language betrays his methods - he orders the Portable Mass Detector, the MZ machine, and, most tellingly, the cargo of Tharils slaves to be "broken out", and describes his warp engines as "busted", as well as ordering his lads to "bust it open" when they encounter the mirror. He kicks K-9.

Rorvik is an exploiter and abuser. His efforts are devoted to using what he chances upon. The Privateer is a slave ship. When its navigator is lost, Rorvik decides to exploit Romana's apparent ability to see through the time lines as Biroc had. He chooses this before using one of the Tharil cargo - that would entail some loss of revenue.

He carries a gun at all times, even pulling it on his men when they are too apathetic to listen to his summary of events. His simple philosophy is that "everything breaks eventually", and as his frustration with being unable to break free of "nowhere" builds, his weapons build up from a simple hand-held energy weapon via the MZ, to the warp engines of the Privateer. In a poetic outcome the mirror reflects this energy back on to its source and Rorvik and his crew suffer an ignominious death.

BIROC

Biroc is the Tharil navigator aboard the Privateer, held captive to "visualise", and provide a way to guide the ship as it crosses the Time Lines. A "time sensitive", it is this gift that has caused his race to be enslaved and exploited by those who possess neither this ability or a technological alternative. After visualising the TARDIS in transit, Biroc escapes from the Privateer, to guide the TARDIS to the Gateway, and proceeds there himself.

Described by Romana as "a leonine mesomorph", and by the Doctor thus; "It's like talking to a Cheshire Cat", he is a highly enigmatic figure. He initially tells the Time Lords that "Others follow" and to "Believe nothing they say". Romana believes him "because he was running". His most telling remark is that he is "A shadow of my past - and of your future".

Mutely beckoning the Doctor to the Gateway and beyond, he gradually reveals that only matter touched by the Time Winds can pass through, and gives the Doctor a glimpse of his race's past.

Before they were slaves the Tharils enslaved humans themselves. In what appears to be a flashback to his (or his race's) former life he argues that "The weak enslave themselves", before later conceding that "You were right - we abused our power".

His motives are opportunistic and altruistic. Like Rorvik he has Romana join him for her abilities, although for far less selfish ends, and with her cooperation. As the only conscious Tharil when the TARDIS passes near the Privateer, it is up to him to intercept it and enlist the help of its occupants.

In doing this, Biroc is not only the salvation of his race, but of the Doctor and Romana in their individual quests.

PACKARD

"Rorvik writ small" would perfectly describe the Privateer's second in command. He reports facts to his Captain, often stunningly obvious ones such as "We've got damage", and is mocked in return - "Well of course we've got damage". Conversely, when his colleague Lane reports that the TARDIS is a ship, he pokes fun; "What - for midgets ?".

His status is barely above that of the other men, such as Lane and Sagan, and he exists as a middle-man, relaying orders downward. He is *not* a technical expert like Lane, and probably looks forward to his own command. Packard's leadership skills manifest themselves in the way he rationalises the comments of others around him leading to a clearer understanding all round. Rather than kicking K-9, he throws the creature out of the ship when it follows him back there.

As a number two, he could probably replace Rorvik if necessary, and his greater caution could result in a less catastrophic outcome for the Privateer and its crew. However, he is not given the chance, and remains one of the lads, ultimately sharing their fate. I·V

EDITORIAL NOTE: WARRIORS' GATE has proved one of the most difficult **Doctor Who** stories to research. Strangely, this is not because of a lack of information, rather there is too much. In this issue we present interview material from the costume and visual effects designers, as well as the author and the director. Perhaps not surprisingly, nearly fifteen years after the events, the different accounts and memories do at times seem to be at odds with each other - and sometimes also with the information we have gathered from other sources, including BBC records and unofficial and unattributable interviews.

For example, Paul Joyce recounts how he rewrote the script for the story from an outline provided by Steve Gallagher. But BBC records and Gallagher himself indicate that several full scripts *were* delivered before any other rewrites (some pages from Gallagher's very first draft are reproduced in this issue). Steve Gallagher does freely admit that his work was rewritten, and not always in a manner he was happy with. So in this case it is quite possible that there is simply a confusion about exactly what stage in the production Joyce's rewrites occurred.

Other conflicting accounts are harder to rationalise, and the editors have decided that it is not fair on any of the parties involved, or on the readers, to try. Please be aware when reading through the interviews and these production notes that other and sometimes contrary viewpoints do exist and where possible are presented.

ORIGINS: Steve Gallagher submitted his initial draft script for WARRIORS' GATE to **Doctor Who** script editor Christopher Bidmead in July 1980. The section reprinted below describes one of the most mystifying and thought provoking structures in the history of **Doctor Who**:

A pair of massive wooden doors set in an arch of mason-cut rock, two decayed pillars supporting a partly collapsed lintel, a ruined statue to one side, an empty plinth with a heap of rubble around it on the other. One of the doors is slightly ajar. The rocks are white and grey, and they blend off into the surroundings imperceptibly.

Biroc, now weary, arrives at the Gateway and leans against one of the pillars. As he regains his breath he surveys the ruins, his face illuminated by recognition and affection. Strengthened by the familiar sight, Biroc enters the doorway, and disappears into the darkness beyond.

The Doctor has been watching Biroc from a distance. Cautiously he approaches the Gateway and follows Biroc through to a vaulted stone tunnel, gloomy compared to the void beyond. There were once elaborate mounts for burning torches along the walls, but these are empty and broken and skinned over with cobwebs. The paved floor is dusty, marked only by a single line of tracks - Biroc's. The Doctors follows these footprints.

There is an open fireplace filled with dead ashes, and over the mantel a square of torn canvas sags, black and mildewed, from a gilded picture frame. Windows to either side are so stained and filthy that no light gets in, and the heavy velvet drapes to them are almost eaten away.

The main feature of the room is the banqueting table. It appears to have been set for a meal which was then allowed to decay for centuries: piles of mould where the fruit bowl stood, skeletons of rat-bitten carcasses with shreds of black dried meat still clinging. The candelabra are cobwebbed, and most of the chairs have been thrown back or overturned.

There are plenty of alcoves and doorways.

A headless black and shiny warrior robot, wires sprouting from its open neck, lies of the floor where it has obviously lain neglected for an age. The design is plain and unfussy, like a space-age simplification of samurai armour. We notice other similar robots, in varying states of preservation. These robots, the Gundans, seem to have got the upper hand in some terminal battle against the Tharks. The twisted remains of the slain Tharks are evidence of the Gundans' success.

One of the black robots stands before each exit from the hall. But many of the archways that at first appear to be exits are in fact perfect mirrors. These too are guarded by Gundans, as if to prevent the feasting Tharks from reaching the mirrors. Some of the guarding Gundans have fallen, leaving mirrors unguarded.

Biroc runs into the hall in a sort of dreamy slow-motion, which becomes slower as he approaches one of the unguarded mirrors. As he reaches it, it seems that he must stop, but instead he appears to dissolve slowly into the mirror. As his trailing hand passes through after him, the manacle on the wrist, blocked by the mirror, slips to the ground, empty. And Biroc is gone. We are left just with the reflection of the deserted hall.

By 1980 Gallagher was new to television, but not to the worlds of literature and broadcasting. A graduate of Hull University he began writing two years after landing his first professional job in Granada TV's Presentation Department in 1975. Describing his forte as "writing weird suspense", this Blackburn-born author tasted success early on when one of his novels became a best-seller both in Britain and the United States. This was *Chimera*, first published in 1979 and seldom out-of print since. The success of *Chimera*, which was turned into a serial for Channel 4 in 1991, enabled Gallagher to quit Granada and go freelance in 1980. Since then his book-writing career has never faltered, as titles such as *Oktober* and *Valley of Lights* bear witness. During his earlier writing career, however, he spent a lot of time submitting ideas and storylines for plays to Producers at various radio stations.

His first commission was a six-part science-fiction drama, *The Last Rose of Summer*, broadcast by Manchester's Piccadilly Radio. which in turn brought him to the attention of radio Producers in London. One of Gallagher's submissions, called *An Alternative to Suicide*, was considered a little too strong for Radio 4 but was passed forward to John Nathan-Turner's office with the suggestion that it might be suitable material for **Doctor Who**.

The arrival of this script co-incided with a moment of crisis for Christopher Bidmead. Having finally reached the stage where he was free to commission his own choices for the show - as opposed to working on material inherited from his predecessors - Bidmead had discovered to his cost that one of his key discoveries was just not suited to the disciplines of television.

Christopher Priest had been a full-time novelist since 1968, chalking up an impressive list of reviews to match equally impressive sales figures. Future world science-fiction was his predilection, although time travel had played major roles in *Indoctrinaire* and *The Space Machine*, the latter book being dedicated to, and derived from, the works of H.G.Wells. Being an admirer of his work Bidmead asked Priest for some story ideas almost as soon as he had landed the job as Script-Editor on **Doctor Who**. In particular Bidmead wanted a Gallifrey-based Time Lord story to wrap up the on-going theme of Romana's recall by the High Council which would permeate the stories from serial two onwards.

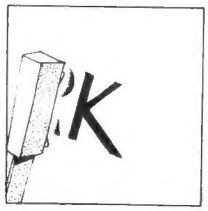
Between them Christophers Priest and Bidmead worked for six months on a political intrigue storyline, preliminary titled *Sealed Orders*, but by June it was increasingly obvious that there were difficulties. (These will be discussed fully in the ***IN•VISION Season 18 Overview***.) Reluctantly *Sealed Orders* was dropped from the schedules, although Priest was paid in full for all the work he had done to date. The problem was thus to fill a 90-minute gap at short notice. The solution was Steve Gallagher's *Dream Time*.

A confessed, if non-committed, fan of **Doctor Who**, Gallagher needed less of an introduction to the series than most - understanding the structure of the shows from his

years as a viewer during the Sixties and early Seventies. He knew the Doctor and companion set-up, but had seen little of K-9 and, of course, nothing of Adric. The specific terms of reference he was handed were to write out Romana and K-9, and to come up with a means for the Doctor and the TARDIS to escape E-Space, the Universe of negative co-ordinates. In fact he was not given the task of writing out K-9 and Romana until he had completed several drafts of the script.

Seeking inspiration, Gallagher found it in the works of one of his favourite film makers, Jean Cocteau, the French writer and film Director whose sense of imagery and imaginative use of the camera had stunned audiences during the late Forties/early Fifties. Even today his productions of *La Belle et la Bette* (*Beauty and the Beast*; 1946) and *Orphée* (*Orpheus*; 1950, based on his own play of the same name) are regarded as masterpieces.

It was these two films that Gallagher recalled as he pondered themes for his **Doctor Who**. His eventual notion was a haunted house, based strongly on Cocteau's enchanted castle from *La Belle et la Bette* and the idea of mirrors, through which certain people could pass, inspired by the famous scene in *Orphée* where a man's hand goes straight through a polished mirrored surface (in truth a huge vat of mercury). The writer also wanted to reprise the slow-motion, dream-like quality of these two movies, particularly the surreal chase sequences in *Orphée* where the characters weave through the grounds and gardens of a castle, covering great distances in impossibly short periods of time.



SCRIPT: The storyline, episode breakdown and first draft scripts were completed bearing Gallagher's suggested title, *Dream Time*. The initial draft contained only the scenes run continuously - there was no heading information for a scene change, merely an asterix followed by stage directions outlining the location and circumstance of the next scene (for example, "Inside the TARDIS..." in the first-draft pages reproduced here).

Gallagher's original concept was of an alternative dream reality into which the Doctor and the Privateer had fallen: the *dream time*. This phrase is a literal translation of the Aborigine word *alcheringa*, which refers to the domain of their myth and history. Gallagher had apparently become interested in Aborigine culture after meeting an Australian while working at Granada Television.

With the change from the dream time to E-space, it was felt that a change of title was also necessary. *Gateway* was suggested, referring to the point of interchange between the realities, but Gallagher pointed out the danger of confusion with the Frederick Pohl novel of that title, and suggested WARRIORS' GATE.

Gallagher imagined his castle as a haunted structure somewhere in the white void between the universes of N-Space and E-Space, with the mirrors leading out and into the currents of the Time Winds. The time-sensitive Tharks (later renamed *Tharils*) could ride these winds like surfers, using them to splay out and swoop down onto any point in the Space/Time continuum - past, present, future and even alternative futures. The castle was therefore a hub where these lines converged and sometimes overlapped.

Also present in the initial draft was the concept of time bombs - silver globes containing a small piece of the Time Winds.

Although making no attempt to describe the Tharks' appearance, describing them rather ambiguously as "leonine ectomorphs with lots of hair...", Gallagher's talents as a novelist served him well when it came to detailing the Privateer and its crew; all descendants of the slaves who had so bloodily revolted against their masters, but who had then become slavers themselves. The following passages are from the second draft scripts, dated August 4th 1980.

The mists swirl and part, and the dim, bulky outline of the Privateer is seen for the first time; its details are indistinct and hazy through the fog. The nose towers high above the ground at an angle, and the base is wide; it is like looking up at a giant frog about to spring...

The bridge is a geodesic structure, with operational zones on three levels to make the most of the space. Uppermost is the helm; on the lowest level and facing forward is the navigator's position. Once gleaming and efficient, the paint is now streaked and aged, the theme colour being that of rust. Fixtures are held in place by tape, glass covers to screen are split and cracked.

Two of the crew, whom we will later come to know as Lane and Nestor, are silent and tense in anticipation. A third, Sagan, the Communications Clerk, sits at his own desk wearing a monitoring headset and intoning the countdown. Even Aldo and Waldo, the crew's two least caring members, have suspended their game of cards for a moment to listen to the countdown. But Aldo also uses the opportunity to steal a glance at Waldo's hand.

As we continue moving along the bridge we come upon the faces of Rorvik and Packard. Rorvik, the Captain of the Privateer, is thick-set, bull-like and bearded. Packard, his second, is tall and gloomy, as if resigned to a lifetime of apologising. Like the rest of the crew both are unkempt...

The pages below are from Steve Gallagher's first draft of the script for Dream Time

might be.

LANE:(From a distance) This is a Shogun.

THE DOCTOR:(Moving across to the pile of globes and reaching for another) A what?

LANE: A Shogun warrior. Old-time robot fighters, but I mean old. Ancient.

RORVIK: You said you know what this place is.

THE DOCTOR:(Holding up the silver globe) A theory, that's all. These globes aren't really solid, they're little spheres of force, the same forces that are screening that doorway and every other doorway like it.

RORVIK: So, what's behind it?

THE DOCTOR: Behind the doorways, who knows? But trapped inside each of these globes is a destructive piece of the Time Winds. Look what they did to that Shogun. They're time bombs, literally.

LANE:(Coming over) I've never seen anything like this. I didn't know anything could age so fast.

THE DOCTOR:(Shifting his injured hand, as if suddenly reminded of it) You'd better believe it.

RORVIK: I still haven't heard this theory of yours.

THE DOCTOR: Every doorway is an access point to another time, another place. Each doorway an avenue to another reality. This castle is one big interchange, a disuseo half-way house.

RORVIK:(Objecting) But we can't get through.

The Doctor tosses the silver globe casually towards Rorvik and moves away. Rorvik grabs for it and is left standing, the globe in his hands and a stricken expression on his face.

THE DOCTOR: No. It would appear we can't.

Inside the TARDIS. Adric is still sitting against the wall with his knees under his chin, K9 is still keeping watch; neither appears to have moved since we last saw them. After a few moments of quiet vigilance, Adric speaks.

ADRIC: K9?

K9: Do not try to persuade me further. I have my instructions.

ADRIC: But...

K9: You must stay here. You are not to leave the TARDIS.

ADRIC: I know that. It was only an idea.

K9: Not a very good one.

ADRIC: But it worked, K9, it actually worked. All that stabbing around that the Doctor was doing before, it didn't get us anywhere. But when I flipped the coin, like he said...

K9: It brought us into greater danger. If that is the proof of the theory, then I fear that the method is faulty.

SCRIPT EDITING: Taking over the scripts in August Christopher Bidmead, together with director Paul Joyce, immediately set about some extensive re-writes - according to some reports, much to the dismay of Gallagher who took it, for a long time, as personal criticism of his writing ability.

Bidmead's main gripe was the lack of rationalisation behind so many of the weird and surreal events in the story. Determined to avoid suggestions of magic, he rejigged large sections of the plot to "add in the science". He changed the castle so that instead of just being a dimensional gateway, it became the zero point in a metaphorical graph plotting the existences of N-Space and E-Space. Some of the references to Time Winds were modified into Time Lines, and even on the day of recording Bidmead prompted the addition of a short sequence about crossing striations in the Time Lines to explain away the otherwise unexplained phenomenon of past, present and possible futures overlapping at the Gateway (the Doctor's overdubbed line as he passes a statue in part four).

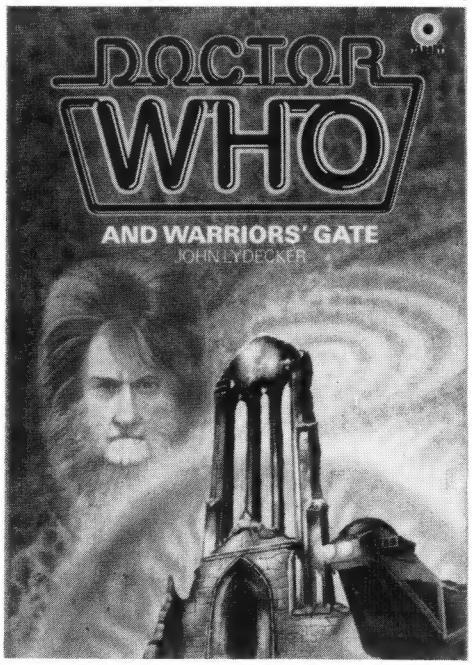
A deleted character was Nestor, whom Gallagher had painted as a slightly effete bridge officer. His lines were subsequently shared out between Packard and Lane. The Aldo and Waldo twins were kept in as comic relief Laurel

Continued on page 8

The Man in the Control Seat

Former editor of *Doctor Who Magazine* JOHN FREEMAN spoke to STEVE GALLAGHER about his work on WARRIORS' GATE. In the interview below he also includes material from a previous interview by John's alter ego Paul Travers (*DWM* #139) and correspondence with ANDREW LANE.

Blackburn-based author Stephen Gallagher, whose other credits include novels such as *Chimera, Rain, Down River* and *Valley of Lights*, has applied his incredibly warped but brilliant imagination to two **Doctor Who**stories to date – WARRIORS' GATE and *Terminus*. (He has a third idea he came up with for the series in his files somewhere. "It will probably re-emerge one day in a completely different form for a completely different market. He once said: "Ideas have a habit of doing that, and of improving along the way.")



Stephen started writing in 1977 and went freelance in 1980 with the sale of his first novel, *Chimera*, after working at both Yorkshire Television and then Granada Television. His first broadcast work was a six-part SF story for Picadilly Radio, *The Last Rose of Summer*. Someone at BBC Radio sent the ***Doctor Who***production office the script for another play, *An Alternative to Suicide*, and from there Christopher Bidmead asked Stephen to come up with a story outline. This was *Dream Time*, which became WARRIORS' GATE. Even at that stage, he was one of many SF authors being considered as potential new writers for *Doctor Who*, which was undergoing a considerable change of style. These included another renowned SF author, Christopher Priest.

"The impression i formed at the time was that both christopher's story and mine were being developed for the same slot in that season. The way it worked was that you'd come up with a stand-alone story, but they'd then give you certain elements to include which would lock your contribution into a particular place in the season's framework.

"Chris was commissioned ahead of me, but for some reason it wasn't working out. I was uneasy when I heard this. It made the whole thing feel a bit like a horse race. I can't imagine someone of Chris Priest's calibre stumbling at the quality hurdle - I suspect it may have had more to do with Chris being a bloody good science fiction writer who wouldn't compromise much to accommodate the format of the show.

"But the outcome of it seemed to be that WARRIORS' GATE went into the slot and Chris's plot was never used."

Stephen had no brief when writing the story. "Not at first, and my original idea was not hugely different to the first script draft I submitted. E-Space didn't fundamentally change what I was trying put over. What happened after the first draft was that changes began to slide in. The final draft I could probably still take credit for conceptually, but in terms of the dialogue and a lot of the construction you're talking Chris Bidmead and not me.

"When you're receiving your commission, the season that's just been made has yet to be seen, and the season in which your story is to appear is eighteen months away. There was no way you could conceive a story which would fit the slot that far in advance. You had to write it in broad and general terms, not even stating the sex of the companion, because it might have changed.

"There *is* an opportunity to indicate some of the structure at that stage, because you know that the Doctor and the assistant are two of the givens. In the case of WARRIORS' GATE the elements that I was asked to include included E-Space and the escape from it, and the writing out of Romana and K-9. None of this had any tremendous warping effect on the story that I put forward, it was simply a case of modifying point of entry and point of exit." There was no collusion with other writers for the season to blend their ideas. "Writers tend to work in isolation from one another and bring their own ideas and material to the show, rather than knock it around just to fit in with everyone else's. It's the script editor and producer's job to unify the whole thing."

"I met with Chris Bidmead and John Nathan-Turner frequently and we got on very well, I thought. On the strength of an initial conversation over lunch at the BBC and the material he'd already seen, Chris commissioned me to do a little outline which didn't cost a lot of money – not a lot of risk for them, not a lot of work for me – but it was one step along the way towards getting a job on the programme. Then from the outline we went to treatment stage which then meant taking the outline and boosting it up into a feasibility study – a few dozen pages at most, still a small package and not the full monty. If it hadn't gone further at that stage the risk on both sides would have been a limited one.

"Throughout all this time I met JNT a few times and Tom Baker once, and stood back in amazement guy who proceeded to demonstrate to me how the Doctor could create a sense of threat in any situation by his reaction to an inanimate object. I was treated to this one man show of Tom Baker in a checked suit being menaced by a cheese sandwich in a an office in Threshold House off Shepherd's Bush.

"When Chris Bidmead accepted the story outline he knew I was working at Granada's central control room and that I was looking to my writing as a way getting me out of there. Chris said he could see the image of the Tharil chained to the chair with its limited amount of movement as a metaphor for me in the bowels of Granada TV, controlling the station and desperate to break out in to the wide world beyond. It was a very perceptive thought, and I was probably the last one to see it at the time.

"The story was heavily edited between leaving my hands and appearing on air. The final version was not as clear as I would have hoped it might have been. I was quite depressed about it at the time; I thought I'd failed the grade. But the hurt of that has faded a bit since I found out that every writer who worked on the show in those couple of seasons had the same complaint. I've

met some of them since and found we shared the same difficulties. It wasn't a personal judgement on me by any means.

"It's also got to be said that I was new to television; I had a lot of radio experience but the requirements for TV were something else altogether. I think a lot of the difficulties and a lot of the friction I felt between me and the production team at the time came from that – an inadequacy of mine which hopefully in the decade plus since I've overcome.

"Having said that, I thought WARRIORS' GATE looked pretty good on screen. The designer and the costume people tuned right into the ideas I'd laid out and then expanded on them – they worked miracles within the budget available. The images were well composed and stylish. The main influence was the work of Jean Cocteau, the French film maker who made *La Belle et la Bette*. This formed the style of the whole thing: the look of the Tharils and the whole kind of magical environment, the haunted castle, the mirrors, were very much my tribute to that particular movie. The journey through the weird landscape owed a lot to *Orphée*, the other really influential Cocteau film.

"Unfortunately, the effort put into this side of things seemed to take energy away from the realisation of the storyline, and I found it confusing. Maybe that's the price demanded by the series production system; I know that the team had extra pressures on top of everything else when an in-house dispute affected studio time.

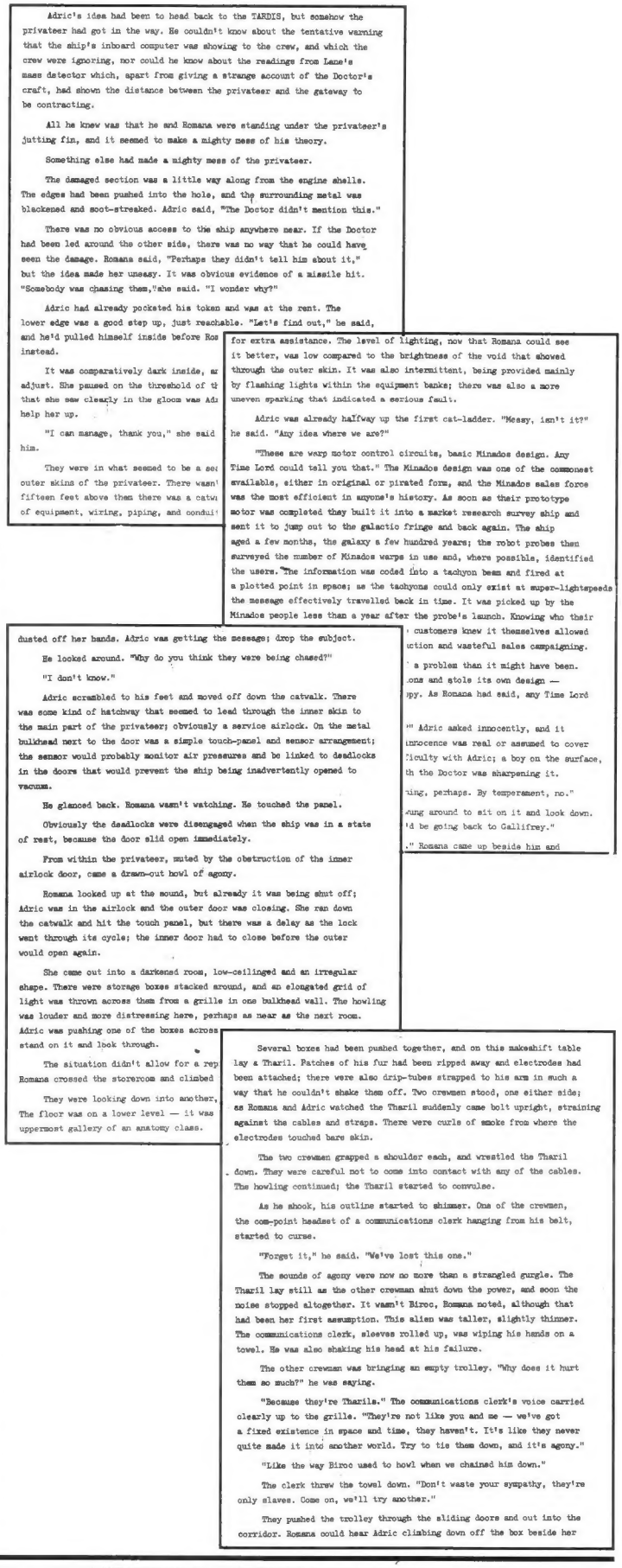
"It's difficult to do any brief summary of the differences between the original idea and the final product. The MZ wasn't mine, nor were the explanations regarding Time Striations and such like. K-9's deterioration differed from my original, and the scheme of the *I Ching* got lost somewhere after part two. If I was forced into making a kind of *Art of Coarse Writing* summary, I'd say that I tried to put a conscious structure into the original of elements that would appeal separately to all three of the programme's audience groups – colourful action and beasties for the small children who hide behind the furniture, mystery and imagery for the adolescents, and an objective intellectual structure for the adults. I was probably trying for too much. In the finished version, the three strands more or less averaged each other out."

Stephen was one of the first Who writers in a long time to novelise his own story for Target as John Lydecker. "I used a pseudonym because I wanted to keep the novelisation separate from future book work. I feel uneasy about taking 100% of the credit for what is really a team effort, and one which will be distinctly different in style and approach to my own prose. Writing a TV script makes you an important contributor to the final product; I don't consider myself its 'author' simply because I don't have total authority. As far as TV credits are concerned the fact is generally understood, but when scripts are then turned into book form the lines start blurring."

"The *original* novelisation I did of WARRIORS' GATE was done quite early, just after I'd done my first draft script, so it followed my original script quite closely. I'm a kind of cross-media being and in those early days I did see it as a way of protecting the material. I feel that if the final on-screen product was something I couldn't recognise or feel proprietorial towards, at least I would have a definitive statement in the novelisation. But of course the novelisation had to be rewritten to match the broadcast version because that was BBC production office policy at the time – they wouldn't wear a divergent version which had all the material that I'd written but which had been lost along the way. It was rush job to get the corrections done to the final manuscript. The original novel had run over length but W.H. Allen had been so pleased with it they actually made provision for a longer book than usual. They were actually happy for it to go ahead as per my original draft, but the production office weren't and I think I had about two weeks' notice to change it. It was a tremendous cut and paste job. Some of the original still made it through and the odd eyebrow was raised at that, but by then it was too late to do anything about it.

"I'd like to think that somewhere in the bowels of the old W.H. Allen there might be the original manuscript. It's unlikely though – I suspect it went into to the waste bin. I don't have a copy myself but I did discover that when I was doing some re-boxing of old files that I've got all the odd pages and paragraphs that were cut out. It would mean one hell of a piece of literary detective work to reconstruct the thing and it would never be quite the same as the original but if anyone was mad enough and obsessive enough, then the material's there..."

*These pages are taken from Steve Gallagher's original version of the novelisation of WARRIORS' GATE, which was rewritten at the request of the **Doctor Who** Production Office to better reflect the transmitted programme.*



Adric's idea had been to head back to the TARDIS, but somehow the privateer had got in the way. He couldn't know about the tentative warning that the ship's inboard computer was showing to the crew, and which the crew were ignoring, nor could he know about the readings from Lane's mass detector which, apart from giving a strange account of the Doctor's craft, had shown the distance between the privateer and the gateway to be contracting.

All he knew was that he and Romana were standing under the privateer's jutting fin, and it seemed to make a mighty mess of his theory.

Something else had made a mighty mess of the privateer.

The damaged section was a little way along from the engine shells. The edges had been pushed into the hole, and the surrounding metal was blackened and soot-streaked. Adric said, "The Doctor didn't mention this."

There was no obvious access to the ship anywhere near. If the Doctor had been led around the other side, there was no way that he could have seen the damage. Romana said, "Perhaps they didn't tell him about it," but the idea made her uneasy. It was obvious evidence of a missile hit. "Somebody was chasing them," she said. "I wonder why?"

Adric had already pocketed his token and was at the rent. The lower edge was a good step up, just reachable. "Let's find out," he said, and he'd pulled himself inside before Ros instead.

It was comparatively dark inside, a adjust. She paused on the threshold of t that she saw clearly in the gloom was Ad help her up.

"I can manage, thank you," she said him.

They were in what seemed to be a se outer skins of the privateer. There wasn fifteen feet above them there was a catw of equipment, wiring, piping, and conduit

for extra assistance. The level of lighting, now that Romana could see it better, was low compared to the brightness of the void that showed through the outer skin. It was also intermittent, being provided mainly by flashing lights within the equipment banks; there was also a more uneven sparking that indicated a serious fault.

Adric was already halfway up the first cat-ladder. "Messy, isn't it?" he said. "Any idea where we are?"

"These are warp motor control circuits, basic Minados design. Any Time Lord could tell you that." The Minados design was one of the commonest available, either in original or pirated form, and the Minados sales force was the most efficient in anyone's history. As soon as their prototype motor was completed they built it into a market research survey ship and sent it to jump out to the galactic fringe and back again. The ship aged a few months, the galaxy a few hundred years; the robot probes then surveyed the number of Minados warps in use and, where possible, identified the users. The information was coded into a tachyon beam and fired at a plotted point in space; as the tachyons could only exist at super-lightspeeds the message effectively travelled back in time. It was picked up by the Minados people less than a year after the probe's launch. Knowing who their customers knew it themselves allowed uction and wasteful sales campaigning.

a problem than it might have been. ons and stole its own design — opy. As Romana had said, any Time Lord

" Adric asked innocently, and it innocence was real or assumed to cover ficulty with Adric; a boy on the surface, th the Doctor was sharpening it.

ning, perhaps. By temperament, no."

ung around to sit on it and look down. 'd be going back to Gallifrey."

." Romana came up beside him and

dusted off her hands. Adric was getting the message; drop the subject.

He looked around. "Why do you think they were being chased?"

"I don't know."

Adric scrambled to his feet and moved off down the catwalk. There was some kind of hatchway that seemed to lead through the inner skin to the main part of the privateer; obviously a service airlock. On the metal bulkhead next to the door was a simple touch-panel and sensor arrangement; the sensor would probably monitor air pressures and be linked to deadlocks in the doors that would prevent the ship being inadvertently opened to vacuum.

He glanced back. Romana wasn't watching. He touched the panel.

Obviously the deadlocks were disengaged when the ship was in a state of rest, because the door slid open immediately.

From within the privateer, muted by the obstruction of the inner airlock door, came a drawn-out howl of agony.

Romana looked up at the sound, but already it was being shut off; Adric was in the airlock and the outer door was closing. She ran down the catwalk and hit the touch panel, but there was a delay as the lock went through its cycle; the inner door had to close before the outer would open again.

She came out into a darkened room, low-ceilinged and an irregular shape. There were storage boxes stacked around, and an elongated grid of light was thrown across them from a grille in one bulkhead wall. The howling was louder and more distressing here, perhaps as near as the next room. Adric was pushing one of the boxes across stand on it and look through.

The situation didn't allow for a rep Romana crossed the storeroom and climbed

They were looking down into another, The floor was on a lower level — it was uppermost gallery of an anatomy class.

Several boxes had been pushed together, and on this makeshift table lay a Tharil. Patches of his fur had been ripped away and electrodes had been attached; there were also drip-tubes strapped to his arm in such a way that he couldn't shake them off. Two crewmen stood, one either side; as Romana and Adric watched the Tharil suddenly came bolt upright, straining against the cables and straps. There were curls of smoke from where the electrodes touched bare skin.

The two crewmen grapped a shoulder each, and wrestled the Tharil down. They were careful not to come into contact with any of the cables. The howling continued; the Tharil started to convulse.

As he shook, his outline started to shimmer. One of the crewmen, the com-point headset of a communications clerk hanging from his belt, started to curse.

"Forget it," he said. "We've lost this one."

The sounds of agony were now no more than a strangled gurgle. The Tharil lay still as the other crewman shut down the power, and soon the noise stopped altogether. It wasn't Biroc, Romana noted, although that had been her first assumption. This alien was taller, slightly thinner. The communications clerk, sleeves rolled up, was wiping his hands on a towel. He was also shaking his head at his failure.

The other crewman was bringing an empty trolley. "Why does it hurt them so much?" he was saying.

"Because they're Tharils." The communications clerk's voice carried clearly up to the grille. "They're not like you and me — we've got a fixed existence in space and time, they haven't. It's like they never quite made it into another world. Try to tie them down, and it's agony."

"Like the way Biroc used to howl when we chained him down."

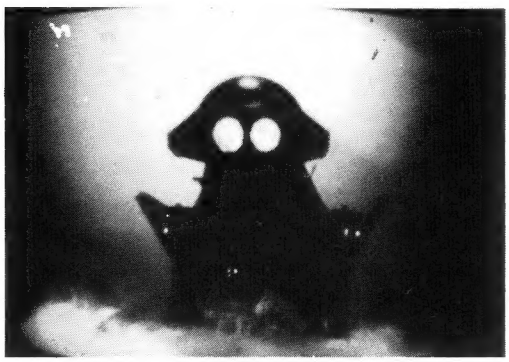
The clerk threw the towel down. "Don't waste your sympathy, they're only slaves. Come on, we'll try another."

They pushed the trolley through the sliding doors and out into the corridor. Romana could hear Adric climbing down off the box beside her

Continued from page 5

and Hardy types, but Waldo's name was changed to Royce just prior to recording by John Nathan-Turner because he felt such similar names were ridiculous, even though one of the jokes was that none of the other crew members should be able easily to tell Aldo and Waldo apart.

Major surgery was performed on all the scenes set in the



The Privateer looking out of the mist, as seen on-screen as she prepares to take off

TARDIS. Although the structure of just about all of them remained the same, so many complaints from Lalla Ward and Tom Baker were voiced during the Producer's run that Bidmead agreed to re-write their dialogue himself to make it more in character. Some of the rewrites were done during mid-August, but following further complaints during rehearsals, the final TARDIS scene rewrites were only completed on September 9th, just a week away from the scheduled first studio.

An example of the changes is the very last scene in the TARDIS, as the Doctor and Adric watch the pictures from E-Space fade into flux. The dialogue is the same up until the Doctor's line, "One good solid hope is worth a cartload of certainties." In place of Adric's next line inquiring if Romana will be all right, Gallagher originally had:

DOCTOR At least Romana learned that much.
ADRIC (PASSING THE DOCTOR A SMALL BOX) The old image translator.
DOCTOR (STUDYING IT FOR A MOMENT) Did you mend this?
ADRIC Yes.
DOCTOR Keep your fingers crossed. (SLOTS THE IMAGE TRANSLATOR INTO THE CONSOLE) No. I'll tell you what. I'll keep my fingers crossed. (HE DOES SO AND THEY BOTH STARE UP AT THE SCREEN. HE SMILES APPROVINGLY AT ADRIC) I think you're going to be all right. In fact - I think you're full of possibilities. (ADRIC SMIRKS WHEREUPON THE DOCTOR PULLS ADRIC'S HAT DOWN OVER HIS FACE)
(A FADING SHOT OF THE TARDIS IS SEEN OVER WHICH IS HEARD THE DOCTOR'S VOICE) N-Space, N-Space, N-Space...

Apart from the argument over this too benevolent attitude from the Doctor towards Adric, it is interesting to note the reference to Adric wearing a hat. Presumably, at some point, such apparel was considered for Matthew Waterhouse's character.

Also deleted from episode four was a short exchange between the Doctor and Romana which, had it been kept in, would have made clearer Romana's decision to leave the Doctor because she felt she was walking in his shadow all the time. This sequence would have preceded the final scene between the two Time Lords as they agree to go their separate ways:

(THE PRIVATEER, LOOMING OUT OF THE MIST, IS NOW ONLY A FEW YARDS AWAY FROM THE GATE)
DOCTOR So K-9 is right. (DUMPING K-9 ON ROMANA) Here, you can carry him a bit.
ROMANA I'm not your dogsbody. It's your turn.
DOCTOR I wish you were. He needs a new one.
ROMANA (PASSING K-9 TO ADRIC) Here. It's your turn.
DOCTOR Come on.
ROMANA; And I wish you wouldn't keep saying "Come on". (TO ADRIC) Come on.

The name of Gallagher's leonine ectomorphs underwent almost as many revisions as the TARDIS scenes. John Nathan-Turner initially had them changed from Tharks to Thars, feeling that the former sounded too B Movie (or according to some reports, for legal reasons). Christopher Bidmead then retitled them Tharls, the name which appears on most of the rehearsal scripts. Only after fan Ian Levine had seen a copy of these drafts was it pointed out to the Producer that Tharls sounded exactly like Thals, the blond, humanoid foes of the Daleks. The name Tharils only appeared in the final camera scripts.

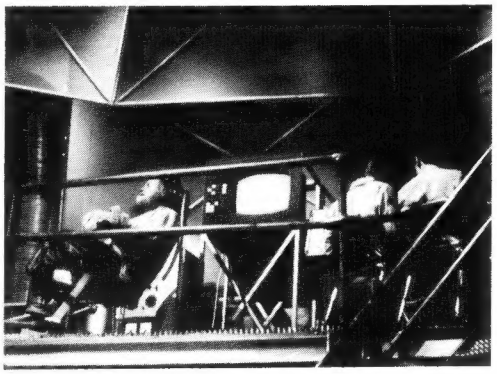
Similarly the Gundans also underwent a name change. They started out as *Shogun warriors*, and according to some reports were called *Gun robots* for a while before eventually becoming *Gundan robots*.

Bidmead also added in the MZ - which he named after his computer. Corresponding with Andy Lane in 1981, Steve Gallagher outlined the changes made to his original submission, and his reactions to the finished production:

"E-space fitted into WARRIORS' GATE without a ripple. There was something so similar in the original treatment that it was only a matter of changing the name.

Gallagher also expanded on the origins of the slavers, and how they came to be trapped at the Gateway, as well as Romana's plan to build a new TARDIS:

"The slavers were from N-space. My second-draft opening scene (which was cut) had them being pursued by a blockade ship and winged with a blast which damaged their motors just as they were making a time/space evasive manoeuver. This robbed them of the power to make the full jump and dropped them into the void, the mathematically theoretical medium through which a ship has to pass when

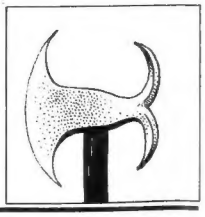


The upper-deck of the Privateer, where Biroc is forced to navigate the Time Lines

making an 'instantaneous' journey.

"The Tharil empire extended into N-space and E-space and, by implication, further universes as well; the gateway which was their castle is the interchange between the variable realities, and the time sensitives' ability to use the gateway was the basis of their dominance until the warrior robots came along. Therefore Romana wouldn't need another TARDIS since the gateway would perform the same function once she grasped how it worked, but maybe it was felt that this wouldn't come over strongly enough so it was changed to strengthen her need for K-9 when she left the Doctor."

Steve Gallagher gives a more detailed description of the process of writing, rewriting and novelising WARRIORS' GATE in *The Man in the Control Seat*, starting on page 6. Paul Joyce talks about his involvement in the scripts in *Joyce Words* starting on page 17.



CUTS: Most of the cuts occurred at the scripting stage. Some have already been mentioned, but amongst the note-

worthy were:

The opening Antonine killer sequence showing the Privateer getting trapped in thealternative world was included, and was written to be shown as a tight shot of the Antonine warrior in the cockpit, with the battle showing as flares andreadouts reflected on the visor of his helmet. This was cut from the finished teleplay, but was included in the novel version.

The original version included considerably more comic material, such as characters stopping in mid-dialogue to thump a light to get it to come back on. Some of this material was centred on Aldo and Waldo (later Royce, see above), who, according to Steve Gallagher, 'were both supposed to be incredibly ancient, dressed in spacesuits aboutfour sizes too big for them" and which were heavily patched. "You get theimpression they've been there for the last fifty years: crews have come and gone and these two have been there longet than anybody else. They know all the nooks and crannies and they kow all the places to hide. They sleep during the day, they go around, empty all the bins and they do a bit of perfunctory light-bulb changing, and nobody challenges them because they're older than anybody else."

There was a good deal of material involving the Gundans at the time of the height of the Tharils' power, when the robots were in pristine condition.

One comic scene was cut at a later stage, according to Kenneth Cope (Packard) - it could not be played because of the physical dimensions of the set. This involved Packard talking to another character (presumably oneof the handymen), who is standing in an inspection hatch behind Packard'sconsole; but every time Rorvik looks Packard's way, the other character ducks down to inspect something, giving Rorvik the impression that his second-in-command is talking to himself.

DIRECTOR AND TEAM: Primarily a writer and Director of Plays (he did *Keep Smiling* under the **Play for Today** banner), Joyce had also done some series work. He may have been recommended to John Nathan-Turner by David Rose, who had produced *Keep Smiling*.

Joyce's approach to his work was painstaking. A true workaholic, he believed in immersing himself totally in a production; involving himself at every level and at every stage to win the support of his cast and crew. He liked to lead from the front, thereby enthusing others with his vision of where a show should be heading. Invariably this meant round after round of meetings in the pre-production stages to bounce ideas and to ensure everyone understood what was being asked of them.

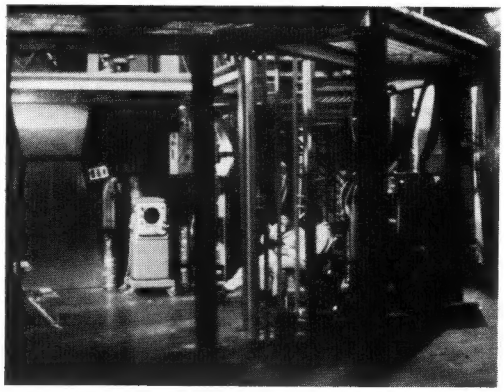
The result was a high degree of loyalty from all the Designer's on WARRIORS' GATE, who appreciated his dedication, inspiration and, above all, communication. As a technically-minded Director, Joyce had a high understanding of what was available to him in the way of technology to help achieve his ambitions. His studio requirements list was very specific. Two lightweight Nike camera rigs for swooping and tracking shots, four conventional pedestal mounted cameras, a hand-held Ikegami camera for extreme close-ups and cutaway shots, plus Inlay, ChromaKey and Quantel facilities. Joyce also asked for, and was ultimately given, permission to hire Scene-Sync equipment for one day's use.

Ironically it was decisions such as opting to go for Scene-Sync which put Joyce on a collision course with John Nathan-Turner. Scene-Sync had been used once already on **Doctor Who** for the MEGLOS story (see IN-VISION issue 47), following which the Producer had been asked for his evaluations of the process. In his reply Nathan-Turner conceded the system had been useful, but doubted **Doctor Who** would ever find a use for it again. Now here, all of a sudden, was one of his own team of Directors doing just the opposite and negotiating for the hire of Scene-Sync equipment to use in a **Doctor Who**.

In the event, the Producer could not really justify refusing the request. For what was required, one day's hire of Scene-Sync would obviate any need for expensive location filming. It was a totally cost-justifiable request. Paul Joyce got his way, but it set the mood for what was to follow.

Backing up Paul Joyce were five mostly young, but all seasoned **Doctor Who** Designers. After horrendous experiences with THE HORNS OF NIMON, where money just had not been available for anything other than the barest essentials, Graeme Story was able to return to a show which at least had a fair, if modest, budget for sets.

Being story five, and therefore an odd-numbered show, it was June Hudson's turn again to handle Costumes. Of all the Designers she was awarded (quite literally) the lion's share of the budget to produce not just outfits for the slavers and the Tharils, but also all the body armour for the Gundan robots. As before on **Doctor Who** and **Blake's Seven** she chose to work in close liaison with her preferred prop maker, Roger Oldhamstead. June Hudson's previous Doctor Whos had been THE RIBOS OPERATION, DESTINY OF THE DALEKS, THE CREATURE FROM THE PIT, THE HORNS OF NIMON, THE LEISURE HIVE AND MEGLOS.



The cluttered and functional lower-deck of the Privateer - where Aldo and Royce play cards and run errands

With a high anticipated requirement for complex makeovers, especially for the Tharils, the position of Make-up Designer was given to Pauline Cox, whose previous claim to fame on the show had been Wanda Ventham's transformation and appearance as the Fendahl Core in the 1977 serial IMAGE OF THE FENDAHL.

Electronic Effects too would have a high profile on this show. Originally "Mitch" Mitchell was slated to handle WARRIORS' GATE, but following his resignation from the BBC, the roster was amended to favour the newcomer who had been almost groomed as his replacement, Robin Lobb. Lobb had worked on THE LEISURE HIVE and was highly proficient in the use and capabilities of Quantel.

Visual Effects would be represented by the man who was virtually the public spokesman for the department, Mat Irvine. His life-long interest in science-fiction and his grounding on such shows as **Doctor Who**, **Spaceships of the Mind**, **Tomorrow's World** and **Blake's Seven** made him ideal for any serial, and indeed he was happy to return to the programme, despite the mauling he had endured on his previous outing, THE CREATURE FROM THE PIT. As enthusiastic as ever about his work, Irvine was also, at this time, an irregular guest presenter on the Saturday morning live show **Multi Coloured Swap Shop**; giving talks and answering questions about Special Effects.

Eschewing the attractions of John Nathan-Turner's "star fund", Paul Joyce chose to pick his principle artists from the ranks of character actors. Although Steve Gallagher had described Captain Rorvik as thick-set and bullish, Joyce went for a slimmer actor to play the role. **Secret Army** had been one of the BBC's major hit drama series from 1977 to 1979. Telling the story of wartime efforts by the French Resistance to smuggle crashed allied airmen safely out of France, one of the reasons for its success was the chilling portrayal of ruthless Nazi Sturmbahnfuhrer Kessler, played with almost psychopathic malice by Clifford Rose.

Rose would reprise his role of Kessler in a series of the same name planned for 1981, but in the meantime Joyce asked him to play the commander of the privateer. He felt

that while the rest of the crew should be seen as listless and grumbling, Rorvik himself would be the icy ramrod keeping the group together.

Almost as big a gamble was casting Kenneth Cope as Helmsman Packard. Principally a writer and performer of comedy and satire during the early Sixties (he was one of the infamous **That was the Week that was** team), Cope had shot to international fame in 1969 with the instant overnight success of ITC's 26-part series **Randall and Hopkirk Deceased** (also known as *My Partner the Ghost*), where-in he portrayed the permanently grumbling ghost of Marty Hopkirk. But during the Seventies he steered away from acting for several years, concentrating on building himself an alternative career as a restauranteur. Having achieved that ambition, Cope returned to the stage towards the end of the Seventies, minus his Marty Hopkirk wig, only to find one of the earliest roles he was being offered was a job on **Doctor Who**.

Paul Joyce picked Kenneth Cope precisely to capitalise on the grumbling, moribund aspects that had made the Marty Hopkirk character so appealing. In the same vein he selected the lugubrious stand-up comedian Freddie Earle to fulfil the role of Aldo. Like Packard, Joyce wanted Aldo to be basically bone idle and shiftless, only more so.

SET DESIGN: With the stock TARDIS interior set due to play virtually its biggest role since THE THREE DOCTORS, Graeme Story was left with only four major set design overheads; the Privateer, the Tharil banqueting hall, the grounds and gardens of the castle, and the Void.

For the Privateer, Story borrowed some ideas from the most successful of his Nimon sets, the main Skonnan concourse. Here the Designer had made very effective use of grille metal pallets to create a "gutsy", very militaristic look. This effect had been enhanced by the harsh, metallic clanging which accompanied anyone walking over these surfaces.

Gallagher's notes on the Privateer described it very effectively as a multi-level ship that resembled, from the outside, a frog preparing to spring. Working in close partnership with Mat Irvine, the two Designers agreed to use the frog motif for the prow of the vessel, but went with a notion of the main body being a conventional squared-off freighter shape sat beneath and behind the helm.

Story contrived the main interior area as one big, continuous set framed with scaffolding to support an upper deck. As the Privateer was a very functional ship, the Designer did not worry too much about disguising the scaffolding. Indeed, for the most part, all the joists, poles and supporting girders were left clearly visible. Gun-metal painted plywood sheets bordered the set and were raised almost up to the level of the studio lighting rigs so that Joyce could get the maximum out of his plan to do a lot of hand-held point of view (POV) shots.

In a move that would save the production a lot of money, Graeme Story was able to find most of the gratings and corridor materials he needed for the Privateer's construction in sets left over from episode two of The Hitch Hiker's **Guide to the Galaxy** which had completed recording just weeks earlier.

In the ancient banqueting hall, the Doctor tinkers with a Gundan with help from K-9

The upper deck was a squared-off U-shaped platform with a stair-way leading down from one end. As on THE HORNS OF NIMON Graeme Story decorated the set with a mixture of stock hardware from the BBC's technical stores, sometimes dressed up (for example, the studio monitors which were switched so they could receive CEEFAX pages as well as images from cameras), sometimes not. The seat where the Tharil navigator sat lashed down was a conventional barber's chair surrounded by a timber-wood frame and dressed with such items as the head clamps and the restraints. Columns of floor to ceiling metal ducting completed the picture.

Below decks the same busy look was apparent. The struts supporting the U-shaped bridge were aligned so they could double as corridors in certain shots. Various doors, hatchways and the gaping maw of the damaged engine room area were constructed as moveable scenery units. These could be swung into position as required to make maximum use of the existing bridge set. The damaged engine room, for example was merely another perspective of the bridge, but viewed through the scenery flat of the holed hull.

The hold area was built adjacent to the bridge. Lit in a deep blue and kitted out with rented oxygen pumping machinery, the main focuses of attention were the bunks whereupon the comatose bodies of eight Tharils lay in repose.

The only other major set for block one was the standard TARDIS interior. However, as so many scenes were situated inside the ship it was decided to erect this set for block two as well.

The second studio would move beyond the smaller confines of TC3 the larger TC1. For this block one very big set was required; the Tharil banqueting hall.

Although very large, a lot of the fake stone wall superstructure came from existing flats in the BBC's scenery stores. Again going for the split-level approach Graeme Story designed the set as a large, essentially rectangular set with a stairway at one end leading up to a balcony which then ran around two sides of the hall. Window arches punctuated along the balcony level so that various characters could look down onto the main set, or be seen running along from a ground level point-of-view. There were several doorway arches at ground level, some of which could be used as doors, and some which could have mirrors or ChromaKey backcloths positioned behind them. One requirement that was dropped (although not literally) was the suspending of a large chandelier above the set. The idea was for this to come

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J JEREMY BENTHAM talks to JUNE HUDSON about how when the COSTUME budget was allocated she got a

Lion's Share

ALTHOUGH the Cocteau motif was a major artistic influence on WARRIORS' GATE, it was used least of all by the Costume Department. Having won agreement, very amicably, that Costumes would provide even the robots on this story, June Hudson preferred to go along a less direct path for the Tharils than simply mimicking Christian Berard's rich, velvet robes designed for the tragic lion king in *La Belle et la Bete*.

The only homage to Cocteau's films apparent on the Tharil outfits was the embossed design on their belt buckles and cuff medallions. Crafted by June Hudson's prop maker, Roger Oldhamstead, these resin-cast emblems, sprayed gold, were far closer to the mask worn by Jean Marais in the Cocteau movie than to a straightforward bas-relief of a lion's head.

Instead the inspiration June Hudson followed was the sea-faring imagery Gallagher had suggested in his scripts where he described the Tharils as plunderers; riding the Time Winds and swooping, like the pirates of old, onto hapless civilisations and raiding their population for new sources of slaves.

Restricted by the technical need to avoid green in any of the costumes, the Tharils wore a basic black and white buccaneer's garb with a jacket in a pale earth brown that would match the facial make-up and wigs worn by the actors. The trousers were large, baggy pantaloons, in a shiny, black, man-made fabric, tucked into off-the-peg fisherman's boots. Also shop bought were the white buccaneer shirts. The jackets were specially designed using a mock suede fabric with an inside lining to give the above-waist material more bulk. The main body of the jacket ran off the shoulders where it joined to sleeves that were wide and baggy under the arm-pit but then tapered down to very narrow cuffs. The cuffs themselves extended down to a point just over the artists' knuckles and were further ornamented with glued-on criss-cross latticeworks of the mock suede. Each cuff also bore one of the resin lion medallions. Further strips of suede were affixed to the front of the jackets to make a fish-bone pattern running from the lapels to the waist. The jackets were shaped to be worn open. A wide cummerbund encircled the waist with a six-inch lion-motif buckle fitted over the mid-riff.

The only problem with the buckle was that it was uncomfortable to wear when sitting down. For his scenes strapped in the navigator's chair David Weston (Biroc) wore his cummerbund unbuckled.

Costumes for the Privateer crew were both simple and cheap. At a cost of just four pounds each, they were U.S imported 1950s-style orange boiler suits. Customising them for the show, June Hudson created a range of identity badges, each one featuring a photograph of the actor and a strip of checkerboard patterning. This patterning was repeated on the epaulettes and on some of the rank stripes worn on the sleeves. Additional badges and medal strips were added to complete the range of military insignia. For excursions outside the Privateer, each crew member wore a sleeveless policeman's padded flak jacket. Lane wore a baseball cap, dyed to match his boiler suit, while Aldo and Royce were provided with wool hats.

Rorvik was the only crew member of the Privateer to wear a specially tailored uniform. Cut from a grey suit wool, Rorvik's uniform was a two-piece outfit, worn over a dark polo sweater. The jacket had a zip-up front and was, like his crew, decorated with various badges and insignias of rank. Two gold stars, worn on each lapel, denoted his (supposed) rank as Captain of the ship.

In contrast to the flamboyant outfit she had worn in MEGLOS, Lalla Ward's final "Doctor Who" saw her dressed by June Hudson in very simple two-piece "coolie" clothes. The high-necked, wide-sleeved blouse was in the actress's favourite colour, red, and was matched with a pair of colour co-ordinated stockings. Calf-length black slacks and a pair of black sandals completed the ensemble.

The biggest challenge of all was the Gundan warriors. The script defined them quite specifically as resembling Samurai swordsmen, which gave June Hudson and Roger Oldhamstead a fixed point from which to start. In the event, however, the only element of the armour that had recognisable Japanese origins was the helmet, with its rounded grille faceplate and silvered crescent emblem.

The basis of each costume was a black leotard plus a black balaclava helmet to hide the artist's features. Each actor was required to wear a silvered vacuum-formed skull mask underneath his black, fibre-glass helmet, which made the whole garb very hot to wear under the glare of studio lights. Hence why, for most scenes, the Gundan costumes were fitted over mannikins.

The body armour combined many different-sized pieces of moulded fibreglass, from the largest chest-piece elements down to the smallest sections of the gauntlets. Constructing the half-dozen or so suits of armour was a major undertaking for Roger Oldhamstead. As each piece was completed, it was sprayed either metallic gold (the cuffs and trunks) or jet black (everything else). By the time he had finished he had several large, black plastic council sacks full of armour bits, which was exactly how Oldhamstead transported them up to Television Centre. Once there, the Gundan suits were assembled as required. A few of the sections had loops and ties for fixing onto the leotards, but in the main, the pieces were just glued in place and then ripped off after shooting.

Visual Effects was allocated one of the helmets for them to mould and construct their two versions with removable "lids" that opened to reveal the robot circuitry inside. (I·V)

Mirror Image

ANDY LANE reflects on WARRIORS' GATE and finds it offers a dual perspective

I must be one of the few fans who had actually heard of Steve Gallagher before it was announced that he had written a script for season 18 of **Doctor Who**. I'd already caught two of his works: **An Alternative to Suicide** - a play on BBC Radio 4 - and **The Babylon Run** - a serial on Capital Radio (the commercial London station), and I'd enjoyed them both immensely. I knew that Gallagher could write exciting SF with an intriguing edge, and I hoped that he could revitalise **Doctor Who**. Whatever he did, I was sure that we were in for a treat.

Season 18 was already shaping up to be one of change and innovation. Compared with season 17, where all the scripts were by established **Doctor Who** writers with the exception of THE HORNS OF NIMON, which was written by a former script editor, season 18 boasted five scripts by new writers. Of all the stories that season, however, including the one with the regeneration, I was most looking forward to WARRIORS' GATE.

Was I disappointed, after that huge build-up of expectation? No. Puzzled, perhaps, but certainly not disappointed. I don't think that anybody was expecting what we actually got, but what we got was good.

Looking back over all those years, I still think that WARRIORS' GATE stands head and shoulders above the rest of the season. It's the only story out of all of them that actually dares to push the programme format to the edge. Gallagher - not a fan, but not unacquainted with the history of the programme - had done what other, more experienced TV writers had avoided: he took the Doctor and the programme out of its familiar environment of studio-bound fake-planet sets and cod-naturalistic dialogue and examined which aspects still worked and which ones didn't in the absence of familiar referents.

Deliberate or not, the fact that the narrative is set primarily in a white void is suggestive of a sea-change in the programme's direction. Is it too much to suggest that WARRIORS' GATE is the point where Christopher Bidmead and John Nathan Turner started out with a blank sheet of paper, and rewrote **Doctor Who** from scratch? WARRIORS' GATE is all about mirrors, boundaries and reflections and, given that the majority of the preceeding four stories were in some sense inherited from the slush pile, the story is, I would argue, the *real* boundary between the old **Who** of Graham Williams and the new **Who** of JNT.

The plot of WARRIORS' GATE is spread very thinly over the four episodes. A group of slavers are trapped between their own universe and another. Their cargo - the remnants of a former empire that once kept humans as slaves - take the opportunity to revolt and escape. The Doctor and his companions do... well, nothing really. The bulk of the story is taken up with the increasingly frantic efforts of the slavers to escape, and the efforts of the Doctor to actually understand what's going on. Fortunately, the success of the story isn't dependent upon the plot: it's more to do with the exceptionally good (in places) direction and the exceptionally literate (for the most part) dialogue.

So: the direction. However much this was actually down to Paul Joyce, and opinion is divided on the subject, WARRIORS' GATE displays some very good moments and some exceptionally clumsy ones. It's almost as if so much time was spent getting right the little bits that everybody remembers that there wasn't enough left to avoid some major blunders. To give an example: the story starts with a wonderful one minute fifteen second tracking shot that convinces us of the wholeness, the continuity of the slavers' ship - the Privateer. It's arguably the only believable spaceship in the programme's history. A lot of time must have gone into thinking that shot out. And yet, in the same episode, when K-9 tells Adric that the *I-Ching* is a means of predicting the broad flow of the universe by using a random sampling technique such as tossing a coin, Adric is already holding a coin. Why? Surely he should take it out of his pocket or something *after* K-9 mentioned it. Again: the best shot in the entire story has to be when a (different) coin is tossed just as the slavers are firing up their motors and attempting to leave the white void. It spins up, past the consoles, past the crew, and freezes in mid air as they press the button and the consoles explode, then clatters onto a work surface. Brilliant. And yet, shortly beforehand, when Captain Rorvik tells someone to connect a high tension cable up to Biroc and turn it on, Biroc reacts *immediately* as if he's been shocked. There's no time for anybody to press a button, let alone connect up a high tension cable. As with Adric's coin, the direc-

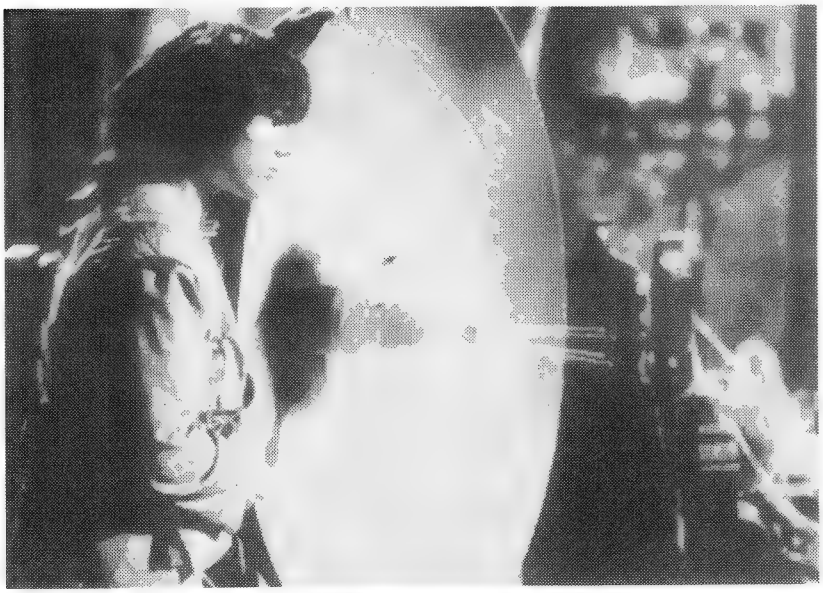
tion is rushed and badly thought through: it goes with the words of the script whilst ignoring its implications. More examples? When Lane (no relation) emerges from checking the damage in the engine room of the ship his hat is smoking, and he knocks it against the wall a couple of times to put it out. A nice moment which must have taken some time to set up in the studio, but it is sabotaged by the scene moments before in which Biroc is supposed to smash the heads of two crewmembers together and escape whilst they crumple to the deck. The problem is that he doesn't smash their heads together, he just gives them a little push and they over-react terribly, sprawling as if pole-axed.

An obvious implication is that time was short: too much had already been taken up with tricksy little moments like the frozen coin, or Lane's hat. Or how about this: there's a lovely shot when we track in on Biroc's eyes and see a wire-frame TARDIS spinning in his pupil as he visualises it. A nice, time-consuming shot to line up, and yet there's a continuity blunder when Rorvik escorts Romana into the privateer: having left the ship with PAckard and Lane, he arrives back with Packard, Lane, Romana *and Kilroy*. Every good shot appears to be balanced by a bad one: time spent on style is taken away from sense. Reflections and mirrors. Even the great point-of-view stuff when Lazlo is creeping up on Romana in the privateer at the end of part two contrasts with K-9's amazing ear, the one that Adric walks off with in order to triangulate a direction and yet manages to grow back well before K-9 and Adric meet up again.

And there's always the axe that bounces off the Doctor's back, of course, but we'll pass tactfully over that one.

The special effects in the story display equal duality. Although the privateer model is beautiful designed, the way it casts a shadow upon the backdrop of the supposedly white void is unfortunate. Also, at points where, according to the dialogue, the privateer and the castle are not within sight of each other, the model shots show them about twenty feet apart. And has it occurred to anybody that the exterior of the privateer, with its prominent bridge area on the end of a jutting neck, seems to bear little relationship to the interior set, where the bridge is the upper level of a large open area with no outside windows?

Of all the stories in this season, WARRIORS' GATE suffers the most from terrible overacting - or, in some cases, just terrible acting. Perhaps, in the absence of anything resembling a set or a naturalistic script, the cast felt as if they had to go over the top to fill in the gaps. The usually reliable Clifford Rose chews the scenery to such an extent that it's not surprising there are large chunks missing from the castle, and Kenneth Cope is... well, just Kenneth Cope. Even Lalla Ward falters when asked to deliver such lines as "Danger, the Doctor's in danger!", and Tom Baker wanders around as if he's left his copy of the script on the bus. although he does use his marvellous voice to best effect. The only members of the cast to come out of it impregnated with anything approaching the odour of roses are the ones who realise that, like the set, less is more: David Kinkaid as Lane, David Western as Biroc and, surprisingly, Matthew Waterhouse as Adric.



Gallagher's script, although it contains some gaping holes (how exactly did a bunch of feudal slaves manage to construct a posse of dimension-hopping assassin robots?) is unusually literate for **Doctor Who**, containing as it does references to various sources that the average fan might not have immediately recognised. The most obvious "steals" are from Jean Cocteau's 1949 film *Orphée* (*Orpheus*). The film, which concerns a man falling in love with death, is an elusive, allusive, elliptical story full of crumbling castles, and mirrors which are gateways to other dimensions. WARRIORS' GATE is full of mirrors, of course: not just the obvious one in the castle - the gateway itself - but also metaphorical ones such as the fact that the slavers were once slaves and vice versa, the parallel between E-space and N-space and the two sides of the coins in the TARDIS and the privateer. WARRIORS' GATE doesn't use *Orphée* in the same way that, for instance, THE BRAIN OF MORBIUS uses *Frankenstein*: instead it ransacks it for images.

There's a castle in Jean Cocteau's 1946 film *La Belle et Le Bete* (*Beauty and the Beast*) as well, but it's not ruined. Far from it: the castle is adorned with rich brocades, ornate chandeliers and a sumptuous feast: just like the castle that the Doctor finds through the mirror in WARRIORS' GATE. The major influence that one can discern in *La Belle et Le Bete* is, however, the Beast himself, an arrogant 'leonine mesomorph with a lot of hair' used to the finer things in life: an obvious basis for the Tharils.

There is a third source that can be discerned in WARRIORS' GATE, if one looks hard enough. Whether it is intentional or not is open to debate: one of the risks of criticism is that the critic reveals more about him or herself than about the text in question. However, one of the main themes of the story concerns chance - the *I-Ching*, the coin tossing, and so on, and its connection with the choices that the characters are forced to make. The same themes can be discerned - indeed, are made explicit - in Tom Stoppard's play *Rosencrantz and Guildenstern Are Dead*. That too begins with two characters - minor characters from *Hamlet* -tossing a coin. That too has a castle. Er... that's it.

A lot has been made over the years of the fact that WARRIORS' GATE bears repeated watching in order to tease out all the strands of meaning. I disagree. There is a lot of imagery in there, but it's superficial. There are deeply symbolic **Doctor Who** stories - KINDA and SNAKEDANCE spring to mind - but WARRIORS' GATE falls into the same category as THE MIND ROBBER: a simple story that just *seems* complicated. There are no deep subtexts - and no reason why there should be. Gallagher and Joyce between them fashioned a visually arresting and always interesting story which bears repeated watching only because it is fun.

And that's all that matters, surely.

I·V

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crashing down in response to Sagan's laser bolt ricocheting off the mirror.

Various materials were used for the mirrors. For most of the acted scenes conventional polished mirrors were wheeled into place, enabling Paul Joyce to use artistic license, shooting sequences involving their reflections. In other cases a glass sheet was positioned so that scenes could be shot behind the mirrors, such as the Doctor's "Do nothing" conversation with Biroc. For effects shots two ChromaKey green drapes were hung over the arches with a gap, invisible to the cameras, left so that artists could disappear behind these curtains on cue. The other locked-off camera was pointed at one of the polished mirrors, positioned so that it reflected the banqueting hall. In order to line up and generate an accompanying electronic effect shimmer, Robin Lobb suggested all mirror effects shots be done together on block two.

In the script there was mention of a short corridor linking the main doors of the Gateway to the entrance doors into the banqueting hall. Again borrowing from Cocteau, Gallagher had imagined a line of hand-held torches, long extinguished, pointing towards the main hall, but for cost and space reasons it was never made.

The void and the Gateway proper was another collaboration between messrs. Story and Irvine. Knowing that a white floor and cyclorama would get very dirty very quickly, the team decided to use ChromaKey green instead. Consequently one huge, triangular end of studio TC1 was floor painted and backclothed with ChromaKey green. The locked-off camera was set to point at the inside of a large, bracket-mounted perspex hemisphere, provided by Effects, which had been spray painted an off-white grey. The use of an electronically generated grey had been discussed, but was dropped in favour of this prop which could make use of back lighting. Gallagher's script had mentioned the void moving towards a dusk as its point of collapse drew near, but this was never accentuated during production.

Two structures were positioned at either end of the triangular cyclorama; the exterior hatchway of the Privateer and the Gateway itself. The hatch was a simple flat metal door assembly with a ramp, sprayed a shiny gun-metal grey. The shiny surface, however, tended to reflect a little too obviously the green cyclorama in the studio. At several points during the transmitted serial, the green reflections are quite prominent.

Both the Effects model of the whole structure, and Scenery's rendition of the lower part followed exactly the design given to both departments by Paul Joyce. In a move rare to television the Director had commissioned a piece of production artwork showing the precise shape of the Gateway and its relationship to the void. This painting (by D.H. Smith, and reproduced on the cover of this magazine) was used as reference not just for the Gateway exterior, but also as a key to the texture and colouring of the banqueting room's plaster walls. The original painting is reprinted (for the first time ever) on the cover of this issue of ***IN•VISION***.

The decision to use photographs for the exterior views of the castle and its grounds came about as a happy blending of circumstance and discussion. Having overspent slightly with FULL CIRCLE there was a perceived need to save on any subsequent show's filming costs, so anything longer than a three day shoot on WARRIORS' GATE would not be countenanced. Powys Castle in Wales was the venue Paul Joyce had in mind for the story, but due to its distance from London, a team would not be able to travel, set-up, shoot all the exteriors, wrap and return home in so short a time. Unwilling to settle for an alternative site nearer the capital, a compromise was argued by Joyce and eventually won. In exchange for scrubbing any filming and cutting out the need for set design work on the castle grounds and gardens, Joyce asked for an extra studio day (which would be cheaper), permission to send a lone stills photographer to Powys Castle, and sanction to hire Scene Sync. Not only would this slash production costs dramatically, it would keep the atmosphere of the story far more closed in than if the action suddenly shifted to the outdoors.

MAKE-UP: Including Biroc and Lazlo, eight artists played Tharils, which meant eight sets of face and hands make-up. Despite only three Tharils ever needing to be seen in close-up, the make-up was virtually the same for all of them.

The prime element was a soft-latex bridge appliance which fitted over the nose, with gradually thinning "wings" slaying out either side to join ultimately with the wigs. The area under the flattened nose piece was thickened and featured a brought out indent. When glued carefully above the artist's top lip the result was a leonine look which was entirely deliberate. The Cocteau motifs being very strong in this story, Pauline Cox based the Tharils directly on the beast make-up worn by Jean Marais in *La Belle et la Bete*. Because they had to be seen in close-up, the appliances worn by David Weston, Jeremy Gittings and Erika Spotswood were built up from nose casts taken from each artist. Those worn by the extras were taken from the same moulds as the three leads, since they did not need to be as closely tailored to the faces.

The wigs were very complex and very expensive. Each one had to be hand stitched and cut using a variety of long white and beige rug fur. The finished product was shaped rather like a balaclava helmet, although slit open at the back. They were pulled over the head of the artists and then carefully grafted and glued to their faces. The white beard under the mouth was a separate attachment. The wig worn by Erika Spotswood, as the female Tharil, was platted to distinguish the genders, even though no other female Tharils were ever seen.

The hairy hands were not gloves but hand-shaped appliances in their own right, studded with long fur and glued directly over the fingers and upper hands of each artist.

Two wigs had to be fashioned for Lazlo; one normal and one with the left side of the forehead shaved away. Make-up for the injured Lazlo required the most time and effort as the whole of the left hand side of his face had to be wrinkled with old-age stipple and then coloured in blood tones to suggest the results of electrical burning. The end product was so effective, however, that during post-production, Lazlo's close-up at the end of part one was shifted, using a Quantel zoom, so that not too much of his scarred appearance was in vision. It is not known on whose authority this was done.

Other make-up responsibilities for Pauline Cox included a similar scarring process for Tom Baker's hand, showing

Continued on page 20

Key to photos on pages 14-15

Left column, top to bottom:

- **Mat Irvine's model of the Privateer**
- **The Doctor repairs a Gundan while camera, K-9 and another Gundan look on**
- **The Privateer, the Gateway, and the TARDIS**

Centre column, top to bottom

- **Lazlo and Romana break distressing news to the Doctor**
- **The secret revealed - how the Privateer lifts off so smoothly**
- **Graeme Harper reflects on the use of ChromaKey for the mirrors**

Right column, top to bottom

- **The ancient banqueting hall**
- **Shooting the MZ explosion from outside the Gateway**
- **Rorvik, Lane, Royce & Aldo prepare the MZ**

Joyce Words

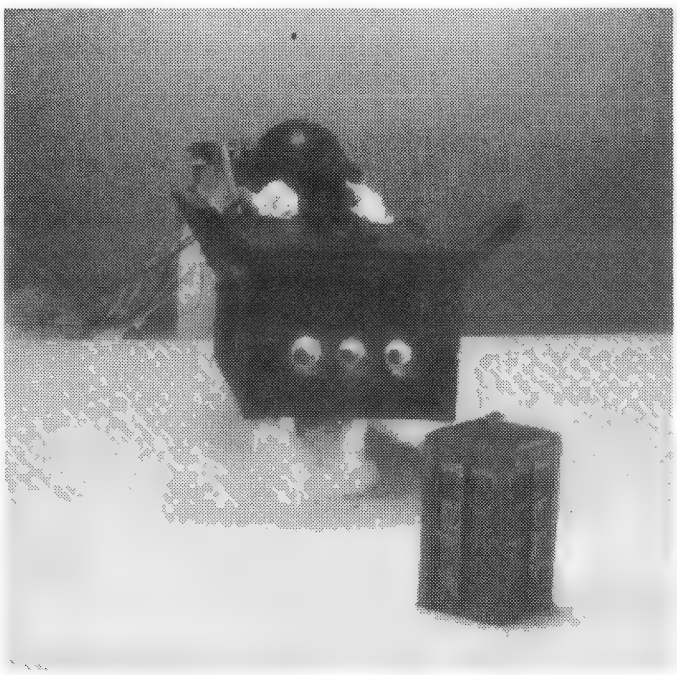
"In retrospect, it now seems a crazy notion - to try to take on and distort a basically unfriendly system run by people who, if not completely intellectually bankrupt, were operating to the limits of their mental overdrafts." From this opinion expressed by PAUL JOYCE, it is not difficult to deduce that his memories of the time he spent on WARRIORS' GATE are not altogether happy ones. In his first ever interview, the director of WARRIORS' GATE told PHILIP NEWMAN why he found it a depressing and frustrating experience.

I WAS offered the opportunity to direct **Doctor Who** on the basis of my experience as a writer and director of a **Play for Today** called *Keep Smiling*. Unlike John Nathan-Turner and other directors he favoured over the likes of me, I had not come up the route of being a production assistant within the BBC. It's a perfectly legitimate route, but I think it encourages proficiency in working the BBC system, rather than the ability to use one's imagination. Personally, I've always believed that if you want to be a director, you should start being one and not a P.A. But then, I've always been an outsider, and I think that it's a better thing to be.

Anyway, I went to see John Nathan-Turner and Christopher Bidmead, who etched the plots of two shows to me - one of which was WARRIORS' GATE. Although there wasn't much to it, I liked the notion of something taking place, if you like, in the cusp of the dimensions, a place where time ceased. Being an admirer of Alain Resnais, the French film-maker, many of whose films deal with time, I thought that this would be very interesting territory to get into.

What I didn't realise was that the scripts didn't exist. I had decided to go with the story purely on the basis of a story treatment which Steve Gallagher had submitted. Subsequently, a document no more than twenty pages long arrived, which was his script for the entire show! It did at least contain a rather simplistic etching of the characters, so one could start to think about casting, but the main problem, as we moved towards engagement of actors and then rehearsals, was that we didn't have scripts. Well, Chris Bidmead and I basically agreed to write the four episodes together; he would take one of the characters and write a speech, I'd write the other, and at the end of the day we'd put it all together.

I think it was a little unfair on Steve, but there was simply no time to involve him. It was very much done on the run, which made it a much more personal show. I would take responsibility for quite a lot of things in it, particularly the episode climaxes, none of which were indicated in Steve's original outline. When we'd finished, I said to Chris: "Steve Gallagher is an excellent science fiction writer, but he hasn't done these scripts, has he? Don't you take a credit for them? To which Chris replied: "Well, that's my job really, to fix stuff." But it wasn't mine. I think directors often do that, but if they do it to the extent that I had, then they should get a credit for it. Chris talked to John Nathan-Turner and they paid me for the writing, but in the end I didn't push for a credit because it would have emasculated Gallagher in a way. Nathan-Turner didn't even seem to want to acknowledge it, really; it was all happening *in a back room*, so to speak. But I was in the back room, quite literally writing the scripts! And I lost the first week of rehearsal as a result of that.



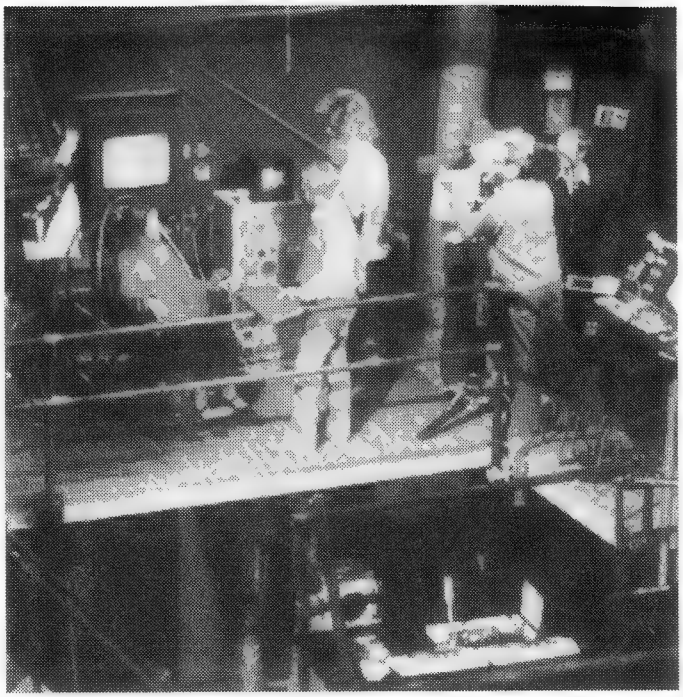
Paul Joyce was heavily involved in the model work for WARRIORS' GATE. Here the Privateer (complete with quartz iodide bulbs and tiny fans for the engines) lands smokily beside the TARDIS.

I wanted the Gateway to have a sort of poetic feel to it, so I commissioned a friend of mine, D.H. Smith, a very well-considered landscape painter, to produce a *conceptual painting*. He delivered an absolutely wonderful design. I don't think the BBC, or John, thought that much of it really. But Graeme Story and Mat Irvine, whom I felt were my closest collaborators on the show, were both very excited by it.

We actually transformed the whole interior of the studio into part of the spaceship, because I wanted the Privateer to be a genuinely impressive, if rather cumbersome, hulk of metal. We even managed to accommodate the steel steps leading down from the director's control box into the design. I wanted something in which I could move around - I said, "Let's walk this ship, let's be there," so we could

have lots of hand-held shots. I knew how distracting a cut between shots could be, so the continuously moving opening shot through the corridors was very carefully choreographed that way, because it builds the tension. Subsequently you think, "When's the cut coming?" and when it doesn't you are kind of forced to follow what the camera does.

But this set seemed to break every BBC regulation ever written, and some unwritten ones too - and resulted in a potentially disastrous strike that actually stopped production. This came about because, pretty early on in the studio recording, the lighting director had seen, in his monitor, that I was tracking a camera along one of the walkways in the spaceship, staring straight up off the set to the lights above. Well, he just went spare. He said, "What are you doing? You're shooting off the set." I said, "But your lights are part of the spaceship. It's got this domed roof with large spotlights on it." He said, "No, you can't do that - I won't allow it." And he stopped the show. I lost about two hours of studio time, which I was expected to make up from within! It was complete madness. I lost control if my own studio. I mean, we were just sat around whilst delegations from various departments made a very close inspection of the whole structure. It was like the VAT man turning up: there was nothing we could do. It was *Kafka-esque*!



A handheld Ikegami camera captures the end of episode two. Note the two-level set, and also the microphone hanging above Graeme Harper

My problem was that I wanted to do everything that "wasn't allowed," and so I rubbed everybody up the wrong way. I was hated by the lighting director, and I was nearly fired during camera rehearsals. Nathan-Turner was basically on the brink of relieving me of my post, because he said that I had not gone fast enough on the first day's rehearsal - which was true. I'd only covered ten pages, and had another 123 (or whatever) to go. At that rate, I'd still be there! But we reached an accommodation, which was that I felt there was a way I could move quicker during the rehearsals, but that I doubted if anyone else could visualise the story I'd co-authored. So, I never left the control box. Our working relationship was never the same after that, although I got the impression that he developed more respect for my abilities as the show continued.

Afterwards, when he saw the episodes, John Nathan-Turner said: "They're terrific. I don't understand what the hell they're about, but they're great!" So he was very generous then, and I realised that my expectations for the show had been far too ambitious. I'd just wanted to extend things a bit, for myself and the programme, from the usual. Barry Letts was not well disposed to this, however. I felt that he was only interested in the *status quo*. Letts and I looked at each other, and we were really speaking a different language, except that I could understand that he would have backed John if he'd wanted to remove me. It never actually got to a public firing with me, because I think my actors would have stood by me.

However, there was never any question that I wouldn't either turn up for, or complete, any stage of the production and the only delays to studio sessions would have been caused by the dispute. It's also quite untrue that "my state of health would not carry me through the day." That's never been the case, and please God it never will be! I think that's either the residue of what they were going to say had they taken me off it, or that somebody must have looked at me and though, "That man looks unwell." Well, to be honest, I probably *did* look unwell. I was without doubt depressed by the way a potentially terrific show was somehow slipping from my grasp, by all these people saying "you can't do this; you can't do that." It was very technically demanding and I did not have a sympathetic producer, so one wouldn't have been a mass of smiles for sure. I know I was concerned about getting all the technical things right as, in many respects, it was new territory for me and we were pushing the frontiers out a bit. I also realised that I wasn't delegating properly to my Graeme Harper, who was perfectly capable of coping with fairly mundane, simple things. I clearly recall a very tedious banquet-table sequence that, due to time pressures I basically gave over the Graeme, in terms of the placement of the cameras. But he was never given the power to do as he wanted within the studio; he was always under my direction. Nothing ever happens in a studio, in terms of what the actors of cameras are doing, that as a director you're not in charge of.

When choosing my cast, my idea was to avoid ageing theatricals and 'stars.' I thought Clifford Rose was a really decent actor, and he brought an absolute conviction to that part which was dead right. I mean, that Captain was a Nazi, for goodness sake - a killer. He was going to command that ship no matter what. The fact that he'd got a hopeless crew, who smoked pot, looked at pictures of women and played cards and all that, seemed to me to be like Shakespeare, with the Princes and the Fools. I thought the way to cast it was to go for actors who had a natural sense of humour, and who could find that even when they're supposed to be hanging around, grumbling about getting their gear on and off, and so on; I wanted that to be like it

Sois in life - tedious. I put Kenneth Cope, Freddie Earle and all those people together because it was a good combination of really good character actors whom an audience would immediately understand, if not identify with, as being real human beings who were on one of the worst missions possible. And I think they coped with that really well.

On top of everything else we also had a tremendous emotional problem running right through the show because we had to write out Lalla Ward and K-9. It was clear that it was a really difficult time for Tom Baker and Lalla, to be aware that this was her last series, and I hadn't cracked that. In fact, neither Chris Bidmead, nor Steve Gallagher, nor I really confronted that part of the story, but I remember that I just had to because I'd got to the end of that page. I vaguely recall the line where the Doctor says: "Well, what a moment to choose." I thought that that was kind of enigmatic, that it summed everything up. The circumstances of

Romana's leaving scene: "I don't think even Tom Stoppard or Harold Pinter could have written a scene that would have satisfied both Tom and Lalla at that point.."

the drama at that point meant that it was, literally, the moment to choose. There wasn't really room for an extended departure anyway, and I'm not sure how Tom and Lalla would have coped with it. Lalla was unhappy and wanted a different scene. I think basically everyone was unhappy, and in the end we recorded it almost in the rush of the scene itself. I don't think even Tom Stoppard or Harold Pinter could have written a scene that would have satisfied both Tom and Lalla at that point. So, I thought the best way was to get them apart quickly.

I thought Tom was the most charismatic of the Whos. He brought all these wonderful, quirky, very human yet eccentric qualities to bear on the character. I think John felt that here he had an actor who was not out of control, but uncontrollable in the sense that he had an absolute handle on the character, and that he knew it better than the writers, the producer and even the directors.

I didn't have a particular problem with Tom. The script had been fairly hurriedly knocked together anyway, so it seemed to me to be only fair that he should feel free to make a contribution and, usually, his suggestions were helpful. However, he would like to remove things: "There's too much, there's too much." Well, it can't all be done by looks, glances, asides and the merest word. There has to be some assistance, particularly for the younger people in the audience.

I remember that he'd always call for the "yellow pencils" - the BBC had these terrible HB pencils which were made of really cheap wood - and start scratching things out. Well, I didn't mind that, but I know one director who had to put up with this and coped very well. After two days of having the script torn to pieces, with Tom refusing to say this, that and the other, he brought in a small tape recorder and said: "Right, I'm going to make sure we don't lose any more of these valuable comments about the script, so I'm going to record this." And from that moment on, Tom Baker was like a baby! I wish I could say that was me, but in fact I didn't need to do that.

I was really trying hard to push the special effects in WARRIORS' GATE. There was a moment, for example, when a coin is flipped and everything comes to a halt. I had this very strong image in my mind of the coin actually stopping in mid-air. The finished image is a little soft and grainy because I wanted the technology afterwards to get right up to it, and freeze it very close. We zoomed and copied and zoomed and copied to the point where they said: "This is unacceptable to transmit." I said, "No, it's not. Do it until the point I'm happy with it, and then we'll decide if it's transmittable."

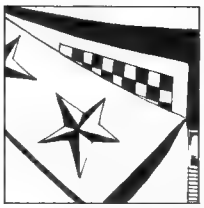
I've always liked the notion that something could be elsewhere and here at the same time - like the idea where if you travelled faster than the speed of light, you'd see yourself arrive. It was this effect that I wanted with the beast in the show. It was the first time I'd seen that particular technique used, where there was a retention of the image - like the effect of light on the retina, something remains even though it has moved on. I meant it to be a sort of poetic indication that the creature was only partly in the reality of the moment we could see.

The other thing which they'd never really seen done before was the way I used black and white photographs. I had a notion that when they got to this particular place beyond the Gateway, it would look something like Powys Castle. I thought that a way of playing with this idea of everything being real but unreal would be to have people in full colour moving through a black and white environment. I remember there was one shot where Tom is walking along a balcony in this monochrome setting. I did this in the studio by putting the image against a board, requisitioning a cameraman, and getting him to shoot it with the camera right up in the air, so the angle was as if you were looking down from an upper balcony of the castle. He didn't realise why he was craning up to the roof of the studio, but I just knew that if he took this one shot and I got Tom to walk against a green screen, that's what I'd get. Tom Baker actually said to me at the end of the show, "The work you did with the black and white photographs was fantastic."

Ultimately I tried to make WARRIORS' GATE like a movie - that was the ideal one was trying to achieve. I'd like to think that it will be remembered as one of those stories that, despite being a bit over-ambitious, was trying something new. I mean, the measure of something worth doing is precisely how well it stands the test of time. With hindsight, I think it's clear that a great deal of planning and imagination had gone into trying to make WARRIORS' GATE really different and interesting. I-V

Continued from page 16

the effects of its searing by the Time Winds, and some work on his hair to add in extra curls and bounce. Baker still had not fully got over his illness, although by October 1980 he was well on the road to recovery.



COSTUME: The Costume Designer's role was pivotal on this story as very close liaison was necessary with Visual Effects, Make-up and even with the Electronic Effects Designer.

Mat Irvine was not sorry to lose responsibility for the Gundans. Luckily Steve Gallagher's stage notes had been quite precise in stipulating them as Samurai-style warriors clad in armour. Therefore the maxim, "If it's worn, it's Costume" was applied. The only elements Effects would have to contend with were the axes and the electronic innards of the one Gundan required to be shown with its head open.

For the Tharils June Hudson would provide everything except where the head and hands were concerned. Committed to following Cocteau's imagery there would be no hats, helmets or any other head attire to detract from the lion-like manes of hair.

Apart from more conventional clothing for Romana and the slavers, June Hudson's one other contribution was raiding the store cupboard to pull out the Doctor's old coat and multi-coloured scarf so it could appear draped over the hat-stand in the TARDIS.

Paul Joyce told ***IN•VISION***: "June tended to have a theatrical kind of way with her in terms of the work she did, which I thought was quite appropriate here. The black and white [castle exterior scenes] indicated a kind of restraint, so it allowed for a full colour effect against it as a counterpoint. I liked that."

For more detail on the costume design, see *Lion's Share* on page 11.

VISUAL EFFECTS: Mat Irvine's 1986 book *Doctor Who Special Effects* covers in detail the responsibilities his department had to handle on WARRIORS' GATE. What follows is therefore a simplified précis to supplement his main article which starts on page 22.

Two identical sized models of the Privateer were built. The main one for filming and establishing shots was on a strong metal frame, clad in sheets of plywood and plastic, with detailing added from commercially available model kits and industrial suppliers. The lights were quartz-iodine bulbs and vents were set into the base of the ship so that smoke could be pumped through to simulate landing jets. The other model was built on a slightly thicker wire frame with more cross-bracing visible. This would both strengthen the skeleton so it could survive the pyrotechnic explosions, and give the illusion of greater internal detailing. Various metal items salvaged from bins and welded to the frame completed this internal arrangement. The model was then clad only in thin plastic sheeting so it would disintegrate convincingly when the explosives went off.

Three Gateway models were built; two large, four foot models for the explosive finale, and one smaller model for use in perspective shots alongside the Privateer and the TARDIS. The original versions of these models were fashioned in clay, from which moulds were taken. From these moulds the "production" Gateways were constructed, using a weak mix of plaster for the larger sizes to aid their disintegration.

On the props side, Irvine's crew had to fashion the Gundan axes, a 60mm replica of a gold coin for close-up shots, a range of hand guns and communicators, a balsa wood framed TARDIS skeleton, Lane's Mass Detector and the MZ Cannon.

The MZ was built on a solid metal, four wheel chassis so it could support the weight of Adric, Romana and K-9 during the story. Wheeled about on castors it featured a cannibalised office swivel chair for the operator's seat, and a large mounted perspex dish fitted with an air-ram so it could be made to tilt. Exterior detailing was in the form of removable side panels. Generally these were just held in place by members of the cast whenever the vehicle was seen in long shot without its covering of foil sheeting. This sheeting had to be fixed firmly down whenever the MZ was moved as it had a tendency to rustle so loudly that speech could not be picked up clearly through the studio microphones.

The hand guns all should have been made from cold-cast aluminium (resin mixed with aluminium powder) but due to the inexperience of the freelance prop maker commissioned to build them, they were cast in solid metal and were correspondingly very heavy - so heavy that Kenneth Cope fractured one of the TARDIS wall panels when he tapped it with one of these weapons. Lighter versions were produced later on so that the cast would not walk lop-sided whenever they had to wear their armaments holstered.

On the other hand the 100 Imperial*s* coins (two were actually made) and the axe used to split the prop table in the banqueting hall were tooled deliberately in cast metal. The Effects coin was intentionally larger than the one taken out from Aldo's pocket as it needed to be shot in extreme close up, and in slow-motion for the sequence of the Privateer heading into the Time rift.

The balsa framed TARDIS came about in response to the Director's desire to show a graphical representation of the TARDIS spinning in the Vortex. The BBC's CEEFAX system was not powerful enough to provide this (CADCAM software and the affordable memory to support it were some years away) so the sequence had to be done with a conventional model.

The crew's communicators and Lane's Mass Detector both made use of micro-circuitry to make the internal light-emitting diodes work effectively. In the case of the detector, the battery supply also had to power the ticker tape printer mounted in the read-out area.

Aside from props and models, the Effects crew also had a hefty overhead in studio pyrotechnics; cueing all the exploding consoles, burning cables and shorting wires. Where there was any risk to actors, members of the Effects team would double on camera. Examples here include Mat Irvine himself swinging the axe into the banqueting table, and the close-up of Lazlo electrocuting Sagan; a shot requiring Irvine to dress as Sagan, with his chest protected by a hidden "bullet hit" plate, and his assistant, Simon Taylor, as Lazlo, wielding wires which concealed the fuse and charge.

One unplanned extra task for the team was operating K-9 during the second recording block. Nigel Brackley, the dog's normal operator, fractured one of his ankles the day before the second studio. As the only other person who could control K-9's functions without extensive practise was Mat Irvine, he got the job.

The lightweight dummy K-9 prop was used for the sequence of Packard throwing him out of the ship into the void, and for the Doctor and Romana to carry out from the Gateway and back to the TARDIS.

STUDIO RECORDING: The extra day of studio recording meant that WARRIORS' GATE would be recorded in two blocks of three days each, instead of the two day/three day split which was usual for a four-parter.

Rehearsals began the week after FULL CIRCLE completed shooting but it was not altogether a happy time. Tom Baker was irritable and very tired due to his illness and Lalla Ward was unhappy because she knew she was leaving at the end of the story. They channelled their feelings into criticisms of the script; demanding rewrites and declaring the whole plot to be incomprehensible. Clifford Rose too took time balancing Joyce's perception of him as a slightly mad Captain Ahab figure with the material as presented to him in the script.

Under great pressure Paul Joyce and Christopher Bidmead battled to get a set of acceptable scripts ready for the final week of rehearsals. Then disaster hit. The week the scenic crew were due to start constructing the sets for block one, all the carpenters at TV Centre downed tools and went on strike, bringing production to a halt. The strike only lasted a few days, but it was enough to stop any work on **Doctor Who** happening September 17th to 19th.

Shuffling the schedules WARRIORS' GATE block one

was moved back one week to start Wednesday 22nd September at 17:30. For this first, fairly short day Joyce concentrated on all the scenes "downstairs" aboard the Privateer, including the hold and all the corridor scenes. These included the very first moments in the story, a long tracking shot around the hold, back out through bulkhead, around the airlock area and then down the corridors - mostly done in one continuous run. Joyce also asked his cameraman to aim the lens upwards and track along the ceiling grating, capturing studio lights behind the grilles - and initiating another strike (see *Joyce Words*, starting on page 17).

One thing Joyce asked for but could not get was a lighting effect to suggest the Tharils glowing, even while comatose, thereby demonstrating the great power of these beings. As a compromise Robin Lobb suggested adding the glow as a ChromaKey effect during post-production. Joyce agreed but had to accept this effect could only be used sparingly. The Tharils would not glow all the time.

Paul Joyce's great ambition was to make WARRIORS' GATE look as much like a movie as possible. One way he found of doing this in an electronic studio was to shoot every key dialogue scene at least twice; once using his normal range of cameras, the second time using just a hand held camera to get reaction, POV, cutaway and extreme close-up shots. The result looked much faster-paced, even during long scenes.

Paul Joyce recalls: "I remember that we had to work hard on getting the climaxes to the ends of the episodes. There was certainly one where Romana is strapped to a chair which was shot with an Ikegami camera, which I think every director wanted to get his hands on at that point; I mean, it was a hue thing to hand-hold, and I would have done more with it if it had been more affordable."

One ad-lib during recording, suggested by Kenneth Cope, was a rehash of the old gag about closing the main doors. . ."after I'm inside".

Day two, starting at 10:30, saw the action moving upstairs to the bridge area. Robin Lobb's *Quantel 5000* saw increasing use as the demand for more time ripple effects grew. For many scenes the Quantel was the last link before the signals reached the master tape. That way, even mixed shots could be passed through the frame store and thereby made to judder, or multiple-image, before they were laid down on tape.

The shot of Aldo's coin dropping out of the air, and spinning to a halt in slow motion proved impossible to do totally real time. Even with the 60mm coin provided by Visual Effects, the shot had to be done several times onto flat flooring, in close up. with an out-of-focus inlay background of the Privateer added during post-production.

The scenery section fronting the damaged engine room area was swung into position for the closing scenes aboard the Privateer. Although neither Tom Baker nor Clifford Rose were ever in any danger, the fight scene between the Doctor and Rorvik took a long time to shoot, partly due to the choreography required, partly due to Joyce's insistence on doing each shot several times, and partly due to the time needed to prepare, set and fire the pyrotechnic charges.

Releasing most of the cast early, Friday concluded needing just Tom Baker, Lalla Ward, Matthew Waterhouse, John Leeson and David Weston (Biroc) in the studio to start doing all the TARDIS interior scenes. Of these, the trickiest to do was the wide shot of the Doctor and Romana looking at the out-of-phase Biroc standing by the controls. The two sequences were recorded separately and only assembled together during post-production.

Another sequence impossible to realise in the studio was the wedge of white light, representing the Time Winds, which streams through the open TARDIS doors while it is still in flight, singeing the Doctor's hand and wrecking many of K-9's memory wafers. Conventional studio lighting just could not generate such an effect, so ChromaKey had to be employed, although only as a cutaway shot as the shimmering beam could not be made to track.

Block one wrapped with several TARDIS scenes still outstanding. These were held over to block two. This first studio had required very little in the way of extras. Aside from the speaking cast (and Lazlo), only eight non-speaking artists had been required, playing either dormant Tharils or background crew members. For the second studio the Tharil extras were be joined by the five artists playing Gundans, several more crew members, Marianne Lawrence as the serving girl, and teenager Erika Spotswood as the female Tharil. Originally the Doctor's Tharil escort to the feast was to have been a young child, but as the budget would not run to a special outfit for a small child, the role was given to a teenage actress who could fit into one of the adult costumes.

After wrapping up the remaining TARDIS scenes, block two commenced proper with the first scenes set in the banqueting hall. This was the afternoon of Thursday October 2nd. The priority for this day was to get all the shots of the banqueting hall in its pristine form completed and into the can. The reason for this was that overnight the scenic crew and Visual Effects would transform the set into its dilapidated state, complete with rotted (provided by Visual Effects) food, corpses, mildewed furniture, plus layers of dust and (latex) cobwebs.

In order to ensure a perfect lining up of several key shots, Paul Joyce employed a conventional video cassette recorder to capture camera angles from day one for reference purposes. Viewing copies from the VT masters would mot be available in time for day two, so playing back a cassette would enable him to line up crucial shots, such as the mix between the cobwebbed and new axes slammed into the table (used several times), and from the newly baked cake to the rotted cake in part three.

The pressures during this second studio were intense, with a great many complicated shots and sequences to record. Again there was no margin for error as part of the banqueting hall set would be struck overnight to make additional space available for the cyclorama sets the following day. Greatest of all were the pressures faced by Paul Joyce. The atmosphere between him and John Nathan-Turner had not improved and he faced the most technically demanding day of all on the Saturday.

Joyce did turn up at TC1 Saturday morning, but it was clear that he was extremely tired. According to some account, while Joyce remained in the Director's chair, technical responsibility for the setting up and execution of most of the scenes done that day, fell at least partly onto the shoulders of Joyce's Production Assistant, Graeme Harper. (But see also Paul Joyce's comments in *Joyce Words*, starting on page 17.)

Paul Joyce certainly had artistic input to the day's work - at the very least from the rehearsals and marked-up camera script. Graeme Harper has, for example, expressed how impressed he was with the choreography of the scene of Packard, Lane and Rorvik circling round Romana as they question her outside the TARDIS. Similarly, Joyce recounts one instance at least wher he delegated some directorial responsibility to Harper for a banqueting scene.

The Scene Sync equipment had arrived and been installed overnight. Blow-ups of the black and white photographs taken at Powys Castle, Welshpool, were mounted on caption stands and the pictures, fed from the slave camera, were treated by Robin Lobb to add an additional tint of grey to bring the colour and contrast of the views into line with the grey of the void. The camera with the master Scene Sync device was locked off and aimed at the green cyclorama set. After that it was just a question of lining the actors up with the caption slides and adding, if necessary, any foreground ChromaKey green screens for shots where a character has to disappear behind something - for example, Biroc walking behind a hedgerow.

It is likely that Paul Joyce had intended to use Scene Sync to do tilt and panning shots. Perhaps because of unfamiliarity with the system, or perhaps simply too pressed for time, simple static shots were used which did not move the cameras at all for these sequences.

Lalla Ward and John Leeson's final day on **Doctor Who** rounded off with all the shots in the void. Unfortunately the

Continued on page 25

Visual Effects supremo MAT IRVINE remembers his work on WARRIORS' GATE and tells IN•VISION how to

Cause an Effect

After his unfortunate experiences on THE CREATURE FROM THE PIT (see *IN•VISION* issue 41), Visual Effects Designer MAT IRVINE could have been forgiven for not wanting to work on *Doctor Who* ever again. But any trepidation he might have felt was dispelled by WARRIORS' GATE. In contrast with that previous story, here was a production IRVINE believes should have served as a blueprint for all future *Who*s of the Eighties. Just for a change, there really was time for planning and discussion.

It was a classic case of how to do a show right. The precise details are a bit fuzzy now with the passing of time, but I do recall that immediately I joined I had confidence in the Director. I wouldn't say Paul Joyce was unique, but it was certainly unusual to find yourself in the company of someone who positively wanted to talk to you and to hear your ideas, someone who volunteered information and who circulated all the ideas around the production team so that everybody knew where they were supposed to be going.

Consequently I always felt in control over what was needed Effects-wise on WARRIORS' GATE, and I think all the other Designers felt the same way too. Paul was new to television and he was very nice to work with. Sadly, he fell out of favour with the Producer, John Nathan-Turner, hence why he never did any other **Who**s, which, personally, I think is a great shame because undoubtedly his greatest skill was communication. Everybody knew what was happening all the time, and who was supposed to be doing what things, which for the servicing side of television is as close to an ideal as you can ever get.

Admittedly, WARRIORS' GATE was an odd one, because there was no location filming; it was all studio work, and the biggest set in the studio was a white void, so there was little danger of the live action set not matching up with the model stage. That said, there was an inextricable link between the Set Designer and myself because the entire white void ended up being done as model work, as were all the wide shots of the TARDIS, the Privateer and the Gateway.

The void for the model work was purely, as you would expect, a white painted set backing onto a white cyclorama, but you couldn't reproduce that in the studio. Studios are very dirty, dusty places, so no matter how careful people are, there is no way a white floor stays white very long. By the end of the first hour there would be footprints and camera tyre marks everywhere. So the studio was green - a green painted floor and a gigantic green cyclorama; in fact I think it was the largest green ChromaKey cyclorama that has ever been tried. It had to be green because of the blue TARDIS. What I produced was a large perspex hemisphere, about three feet in diameter, sprayed white inside and lit from behind so that it cast a diffuse milky grey glow. The camera for the background *looked* into that glow so the Electronic Effects Operator could key it in place of the green.

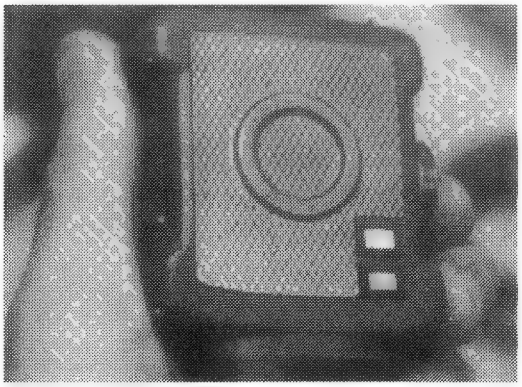
We had discussed two other possibilities; a plain white painted board, or even simply just keying in a white-out from the EEO's desk. In the end we went with the hemisphere simply because we felt it would give a subtle extra sense of depth to the picture; that you were not just viewing a blank area of white, but something that 'felt' more three dimensional.

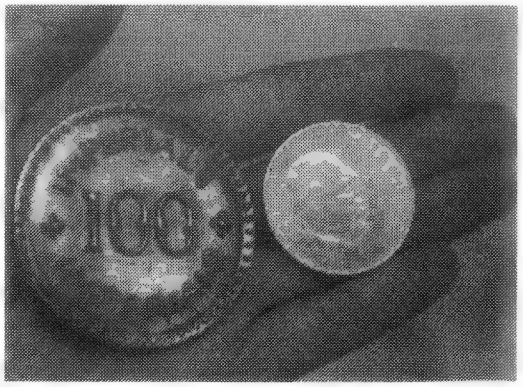
When we got the scripts they still bore the original title of *Dream Time*, which I quite liked. There seems to be an unwritten law in **Doctor Who** that no matter how good the original title, it will always be changed before it reaches the screen. WARRIORS' GATE wasn't bad, but I think *Dream Time* more accurately summarised the story.

Just the lower part of the Gateway was ever built full size. All the top part was only ever a model. So too with the Privateer. Graeme Story and I were able to spend a lot of time planning what the ship should look like and how much of it would need to be built full size. Now that is the way I would like it to work all the time, and it is the benefit you reap when you're given more time than was usually the case on a **Doctor Who**. Any Effects Designer will tell you there never was enough time to do **Doctor Who** the way it deserved to be done, but in this case the circumstances were right, and the end result proves the point.

The liaison between Graeme Story and myself was very good. Apart from the overlap of the doorway and part of the hull, we knew basically that I would be designing the exterior of the Privateer, and

Several of the communicators had working LEDs. The cast kept the small props in their pockets so many left the studio with the actors





The 100 Imperials *con was nearly 60mm in diameter - larger than the Churchill Crown which Mat Irvine originally intended to use*

Two of the axes were solid metal, the rest were made from fibreglass. For a key insert, Mat Irvine swung one of the metal axes into the banqueting table himself.

Graeme would be handling all the interiors. So the initial decisions we had to make very fast, because there was no point in Graeme going away and designing an interior like the *Starship Enterprise* and me designing an exterior that looked like something from Steptoe's back yard. So our thinking went along lines of: it's a pirate ship flown by a band of marauders, it's going to be pretty tatty.

We had a full script for the story right at the beginning - which, again, was unusual for a **Doctor Who** - so we could plan and sketch out where things needed to be. What did we need to see? We knew there was a hold somewhere and an airlock, and for the practical reasons of television we knew had to be at floor level. There was no point to building the airlock half way up the side of the ship because you had to lead out onto the white void beyond it. Okay, I accept the cast probably should have been seen floating in the air as voids presumably don't have floors, but this is where you have to keep the limitations of a television studio in mind when you're designing.

The airlock also had to have an entry ramp because the script referenced this big M.Z. gun that had to be trundled in and out. Luckily we built this ramp quite large because the gun tended to behave like a supermarket trolley, in that it had a mind of its own and refused to be pushed in the direction you actually wanted it to go.

We knew as well that the ship had to have visibly big engines since there is a point in the story where the marauders try to blast the TARDIS using the exhaust ports. Another pointer for us was that pirates were obviously human in nature. They might not be from Earth but you could tell they were humanoid enough to build spaceships along humanly recognisable lines, i.e; with a bridge, an engine room, a crew deck, etcetera.

From my point of view I noted that all the Privateer really had to do was take off once rather shakily and then blow up, so I knew I wouldn't have to worry about doing shots of it soaring gracefully through the air. That was how it came to be a rather ungainly, box-like structure which people have variously described as a cross between a begging dog and a duck. Another advantage to getting a full script in early was that you knew what would happen to the ship at the end. There's nothing more depressing than spending a lot of time building a solid and very robust model for filming if you don't know, until it's too late, that the thing has to blow apart convincingly in the final episode. Forewarned being forearmed I knew it would work best if I made two models of the Privateer; one fully framed with plasta-card cladding, lights and all sorts of 'widgets' for detailing, and another much simpler version which was essentially just a welded wire frame plus a few details.

The absence of any location filming did mean there was a little bit more money to spend on the model shooting. This wasn't always the case. By the time you were approaching the end of a **Doctor Who** season money was normally very tight, so a saving on location work did not necessarily mean you could spend more on Effects. That late in the year, nine times out of ten it meant there just was not the money for location filming, full stop. However, with WARRIORS' GATE, a lot of the Effects work was perceived as very integral to the story, so I did get a bit more money and hence I was able to do a lot of high-speed filming on 35mm, as well as 16mm. Normally only Ian Scoones was ever allowed to get away with 35mm on **Doctor Who**.

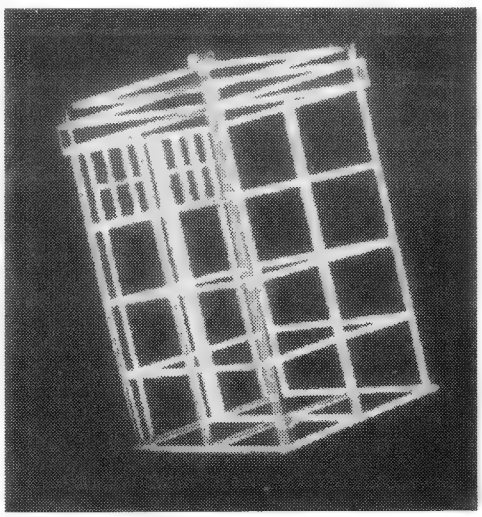
I used a pneumatic ram to elevate the Privateer model to give it a smoother take-off than if I had simply used wires. For the shot of it taxiing before lift-off I used a trick I had first tried on the pilot programme for **Q.E.D.** which had been about air safety in the wake of the Tenerife air disaster. I had needed to recreate the collision of these two 747s using models, and the problem was getting these two aircraft models to move with the lumbering gait you tend to associate with 747s. I hit on the idea of borrowing one of those miniature turntables the film unit at Ealing had been using for years. Basically these devices are small, electrically operated turntables that can also move along a length of track. The film crews would often take them to museums, or the like, and mount vases on them so the vases could be rotated and moved from side to side without having to change the camera angle. These turntables have such a very fine movement, so you can get incredibly precise and very slow increments, which made them perfect vehicles for turning these 747 models on their axes, and then moving them forwards. So I borrowed one of those for the Privateer.

The design of the Gateway was interesting because, yet again, it was an example of how Paul tried to bring in ideas from the movies. Paul had commissioned a freelance illustrator to do a piece of production artwork, which was a colour painting showing an architect's elevation of the archway itself [see front cover]. He gave Graeme and I copies of this and told us it was what he wanted, which was his prerogative, being the Director. So Graeme knew what and how much he had to reproduce as a scaled piece of set construction, and I knew how much I needed to build as a plaster model. It had to be weak mix of plaster as a key moment in the action is the scene where it blows up.

The destruction scenes took about twenty seconds each to shoot, with Eugene Carr as my Film Cameraman and with me firing off various electrically detonated flash and pyrotechnic charges every second. The destruction of the Gateway was done twice, or rather, aspects of it were done twice. I had two cameras running for each; the Mitchell 35mm was running at 120 frames per second and the Locamm 16mm at 500 frames per second. Because of the distance to speed ratio I used the 16mm for all the wide-angle shots and the Mitchell for all the close-ups. There were two complete Gateway models so by doing the destruction twice we ended up with four pieces of film, all taken from different angles. I did not edit and cut the film together. Paul did that job, although I must say he made it a much longer and more spectacular scene than I was anticipating. I was pleased because the effects themselves went right and so it was nice seeing the finished result suitably dubbed with the right bangs and explosion sound effects.

I wasn't too worried that Effects didn't get involved with the Gundan robots. My feelings about designing alien creatures for **Doctor Who** were well documented last time [see ***IN•VISION*** issue 41], nevertheless it comes down again to the fact there is no hard and fast rule about who gets to design a monster. Sometimes it's Costume, sometimes it's Effects, sometimes it's even Make-Up, and occasionally it can be a combination of all three. On WARRIORS' GATE June Hudson came up with a very workable design and felt she was capable of handling all the aspects of construction. There was a lot I had to do on the story already, so I was probably quite pleased not to be involved there, although Effects did get roped in to do the axes. I•V

Jurassic Park *is wasn't - even the apparently computer-generated image of a mathematical model of the TARDIS actually had to be a model*



Top Rate

Doctor Who returned to BBC1's screens in top form on Saturday January 3rd 1981 after its three week break for Christmas. Part one of WARRIORS' GATE clocked up nearly two million extra viewers from the audience total reached for the last episode of STATE OF DECAY. With 7.1 million tuning in, and at position 88 in the charts, it was the highest rated episode of the season so far, but the best was still to come. Although next week saw the traditional slump for an episode two, it was only a drop down to 6.7 million and to 93rd place nationally, which still left it with over half a million more viewers than had watched even the top placed episodes of the previous four stories.

The big jump was episode three. With an audience of 8.3 million and at position 59, it was the highest episode of the season, narrowly eclipsing part four which came in with an impressive 7.8 million, in 69th place. The overall average audience of nearly seven and a half million was the best for the year, awarding WARRIORS' GATE the status of the only show in season 18 with all four of its episodes inside the top 100.

Leaving aside the objective merits of the drama itself, it is difficult to assess exactly why this serial proved so popular, although any one, or a combination, of several factors could be contributory.

A major element would certainly be the continuing popularity of K-9 among the Doctor's younger viewers. Almost since John Nathan-Turner announced the dog's departure from the series in March 1980, campaigns to save K-9 had featured large in the nation's newspapers. Both The *Daily Express* and *The Sun* had printed long-running features during the summer, and Sparrow Books, the publishers that year of Dave Martin's four K-9 children's books, announced in the autumn they were happy to act as the official platform for all those still keen to have a say in urging the BBC to change their minds about the fate of the mechanical pooch.

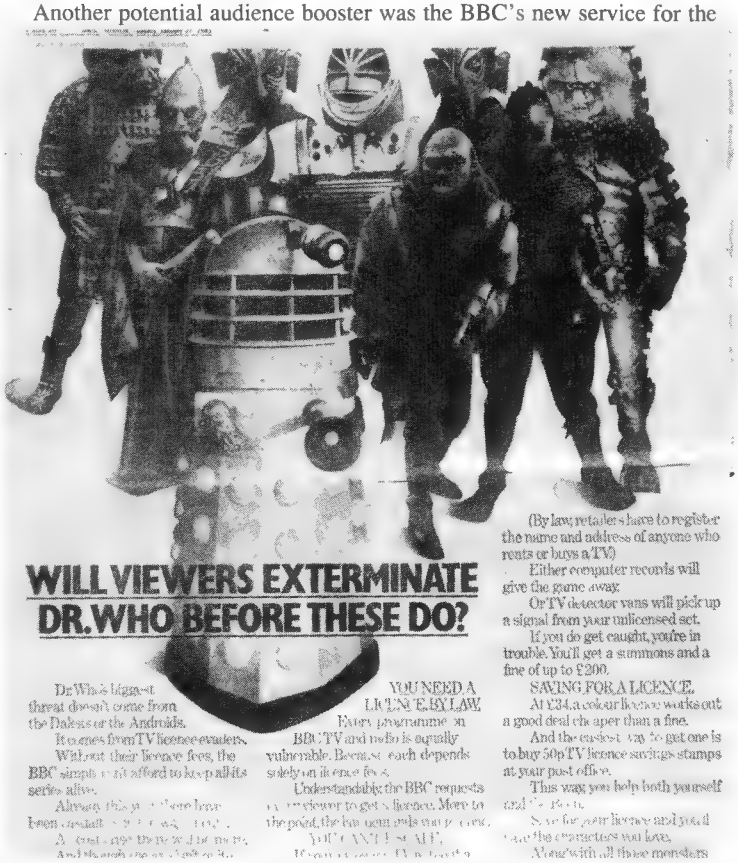
Nevertheless the **Doctor Who** Producer was not persuaded to stay execution and stuck to his assertion that K-9 would leave by the end of the 1980 production year. So it is very likely a large number of the audience for WARRIORS' GATE were those switching over to see how this much loved character would be written out of the series.

Further factors in the equation include the absence of **Buck Rogers** from the ITV schedules, and the shifting of **Doctor Who**'s timeslot away from direct competition with any glossy American drama shows. **Buck Rogers** had been absent from British TV screens since just before Christmas although it had been announced he would return in a networked timeslot on January 14th. Without **Buck...**, nor any gloss material from the USA, the ITV line-up for the first weeks of 1981 was pretty limp, falling back on the old mix of game shows and variety acts against which the BBC always did rather well on Saturdays.

The gradual pulling back of **Doctor Who** to much nearer five o'clock also gave it a head start from the line where audiences tended to mix after the afternoon saturation of sport on both prime channels. With ITV and BBC finishing sports coverage at around the same time, the only real opposition to **Doctor Who** was the news, which tended to attract smaller audiences at weekends than during midweek.

That said, the surreal and intriguing nature of WARRIORS' GATE cannot be ignored in plotting that show's rise to ratings prominence. Not often did episode fours top the first night episode ones, yet this is precisely what happened here. Playing its part, the *Radio Times* for episode one incorporated, above the cast and credits listing, a cryptic paste-up graphic of the police box with its door swung open, revealing a beckoning star-scape beyond.

Another potential audience booster was the BBC's new service for the hard of hearing; programme subtitles broadcast on page 170 of CEEFAX. Although the service had been piloted extensively during 1980, its official launch was only around Christmas of that year. Keying the contents of transmission scripts into the CEEFAX database was very time-consuming. Nevertheless **Doctor Who** was still considered prestige enough to be one of the earliest beneficiaries of this service. With very few gaps, all **Doctor Who** episodes from WARRIORS' GATE onwards would be accompanied by CEEFAX subtitles.


WILL VIEWERS EXTERMINATE
DR.WHO BEFORE THESE DO?
Dr Who's biggest threat doesn't come from the Daleks or the Androids.
It comes from TV licence evaders.
Without their licence fees, the BBC simply can't afford to keep all its series alive.
YOU NEED A LICENCE BY LAW
Every programme on BBC TV and radio is equally vulnerable. Because each depends solely on its revenue.
Understandably the BBC requests everyone to get a licence. More to the point, the law demands that you do.
(By law, retailers have to register the name and address of anyone who rents or buys a TV)
Either computer records will give the game away.
Or TV detector vans will pick up a signal from your unlicensed set.
If you do get caught, you're in trouble. You'll get a summons and a fine of up to £200.
SAVING FOR A LICENCE.
At £34, a colour licence works out a good deal cheaper than a fine.
And the easiest way to get one is to buy 50p TV licence savings stamps at your post office.
This way you help both yourself and the BBC.
Save for your licence and you'll save the characters you love.
Now with all those monsters

There was virtually no specific press coverage or promotion of WARRIORS' GATE, although one additional piece of Home Office Broadcasting Department publicity just might have steered a few erring viewers back into the **Doctor Who** flock in time to influence ratings. From mid-January the BBC began taking out full-page advertisements in all the national daily newspapers warning of dire consequences for programming if license fees were not paid promptly by the public. Most infamous of these ads featured a collage of **Doctor Who** monsters, underneath which was printed an ominously accurate vision of the future:

Without their license fees, the BBC simply can't afford to keep all its series alive. Already this year there have been casualties in the way of cuts. As costs rise, there will be more. And though the axe isn't quite poised over ***Doctor Who****, it's certainly being sharpened...*

The earliest of these advertisements (see above) appeared on Sunday January 25th 1981.

ITV (LWT region) SATURDAY 3rd JANUARY 1981

SPORT	NEWS	SEARCH FOR A STAR	PUNCH LINES game show	3, 2, 1 (New Season)	film MAN ABOUT THE HOUSE			NEWS	THE PROFESSIONALS (rpt)		THE BIG MATCH	
5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00

BBC 1

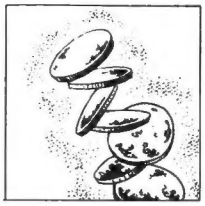
SPORT ON	ARTS	DR. WHO ep.1	NEWS	THE DUKES OF HAZZARD (new)	JIM'LL FIX IT (new)	DICK EMERY SHOW (new)	film SOPHIA LOREN; HER OWN STORY				NEWS	HEROES OF ROCK 'N' ROLL
5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00

BBC 2

film STRAWBERRY BLONDE		THE EGG AND THE CHICKEN, THE MOLECULE		RUGBY SPECIAL	NEWS	SHAKE SPEAR IN FOCUS	film THE CHESS PLAYERS				ARENA (new)	

Continued from page 21

hurdles of time and pressure led to a very noticeable continuity error. In an early void scene, Adric removes one of K-9's ear antennae to use in a triangulation exercise. He replaces it later in a part three void scene, just after Packard indicates the dog, saying, "There's our bad luck"). However, what no-one remembered was that Paul Joyce had recorded all of K-9's episode two and three scenes in the banqueting hall with both ears firmly attached. The episode three shot of Adric replacing the ear was subsequently deleted, assuming the audience would believe it had been replaced in episode two before K-9's arrival at the hall. However, although he deleted this shot, many other void scenes were recorded of the dog clearly minus one antennae. By the time it was spotted during editing, it was too late to change.



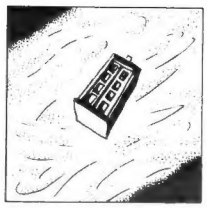
ELECTRONIC EFFECTS: Never before on **Doctor Who** had such demands been made of Quantel. Using the latest 5000 series machine Robin Lobb was able to do many stunts impossible with the earlier 3000 machine. The zoom facility not only excised some of the gore from episode two's climax, it enabled the Director to take a close up of Biroc and zoom right into his eye with no loss of focus. Locking off the frame made for a perfectly steady superimposition of the spinning TARDIS frame in part one.

The multiple frame storing facility of the 5000, plus its ability to introduce precisely timed delays made for one of WARRIORS' GATE most memorable images; the slowed, out of phase flight of Biroc from the Privateer to the TARDIS as he "rides the Time Winds". The script actually describes this sequence as: "A stream of wild white clouds rushes around him, enveloping him.

Lazlo and Romana's flight into the void, combined inlay with ChromaKey and Quantel. A delayed ChromaKey picture of the artists in the void, generated from the Quantel frame store, was fed to the inlay desk where it was blurred and faded to the point where the artists became indistinct. This image was then re-coloured to add a shimmering glow. Finally the image was mixed with the live action and the backgrounds to achieve the final composite.

Multiple frame store images were less successful in providing one of the final moments of the serial; the liberation of all the Tharils from the wrecked slave ship. Intending to show scores of awakened Tharils leaving the vessel, the finished shot still looked like there were only eight of them.

The remaining electronic effects were more basic; a laser bolt from Sagan's gun, and a soft red glow around the filmed footage of the TARDIS model just prior to the big explosions.

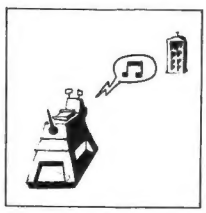


SOUND: Although Radiophonics would play its usual role in adding everything from electronic motor hums to laser gun blasts, a lot of work was done during the studio sessions by the Grams Operator to give this serial its notoriety for a highly distinctive use of sound.

Reverberation was added to the output from the mike covering a lot of Biroc's speeches, especially those in the TARDIS and behind the mirrors. The idea was to echo his voice in the same way Quantel would be used to "echo" his body.

Dick Mills picked up on this for some of his "atmos" tracks. Simple tapping sounds were multiply echoed and allowed to bleed away into the distance, suggesting the ghostly qualities of the banqueting hall.

The Gundan litany, spoken by Robert Vowles, was passed through a Vocorder to add a metallic twanging sound. The processed sound track was then slowed or distorted in line with the Doctor's struggles to get the robot's speech circuits working again.



MUSIC: Closer than usual collaboration took place between Dick Mills and Peter Howell due to the unusual nature of this show. Because the Director wanted an on-going radiophonic atmosphere soundtrack throughout so much of the story, there was a greater than normal need to segue Mills "atmos" tracks with Howell's specially composed music. During Lazlo and Romana's escape, for example, the high pitched roar of the Time Winds was an effect, while the rest was synthesised music.

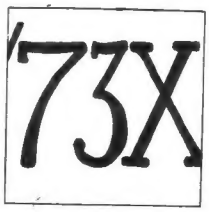
That said, Dick Mills' time winds effects track was mixed and treated as music by the BBC - in the same way as the TARDIS (de)materialisation sound has always been a music cue.

As with the radiophonic sound effects and the grams tracks, Peter Howell too went along with using a lot of echo and swirl when he came to writing those passages set either in the void or inside the castle.

His greatest pride, according to some interviews, was using the latest generation of synthesisers to create music that sounded as though it had come originally from medieval source instruments. In truth, none of the instrumentation used for WARRIORS' GATE came from anywhere other than synthesisers.

Paul Joyce's opinion of Peter Howell was that he was "very good. He understood it very well and gave me lots of nice stuff which was all really delicately done."

A 1'31" track of the banqueting music (and some of Dick Mills' Time Winds sound effect) was included on the BBC's *Doctor Who - The Music* record in 1983 (REH462). A version of the record was reissued on CD from SilvaScreen retitled *Earthshock* in 1992 (FILMCD709).



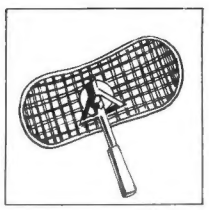
POST PRODUCTION: Episode two's ending was changed during editing from Steve Gallagher's original climax. He had envisaged the close-up on Romana screaming, but had then gone on to add two further, very short scenes, over which the sound of her yells would be heard in echo. The first would have been a shot of Adric hearing the scream from the void, the second would have been the Doctor, cornered by the slavers, backing away until he is suddenly swallowed by one of the mirrors. The absolute closing shot would have been K-9 closing on the mirror in bafflement.

The axe shot splitting the table in the banqueting hold was felt to be so effective, it was used twice in the production - once as a premonition of things to come, and then when things finally came.

As mentioned above, Quantel was used extensively during editing and post-production, often to achieve quick zooms that would have been impossible from a studio camera.

Sagan's death - electrocuted in close-up - was slowed down in post-production.

Once assembled, all the episodes came in under 25 minutes, but episode four only just made it. As complete it would broadcast for 24 minutes, 53 seconds.



TRANSMISSION: WARRIORS' GATE was originally scheduled to broadcast starting on December 20th. The decision to go with a two week Christmas break was not made until after production had completed.

Opening the new, spring season, its first episode was broadcast on January 3rd, at exactly 5.20 pm and 36 seconds. This was the time shown on the CEEFAX graphic preceding the titles, announcing the sub-title service available for this story. The CEEFAX advertising graphic was a yellow block illustration of a Dalek.

NARRATIVE (Continuity & Trivia): Romana prevents the Doctor from operating the TARDIS's reverse bias while in full flight. This is presumably dangerous since she subsequently asks the Doctor if he has a death wish.

Romana describes the TARDIS stores - she says that "nothing's catalogued; half the shelves are empty."

In answer to Packard's question about how the TARDIS navigates through the vortex, Romana says: "I use a digital model time cone isometry parallel bus into the image translator. Local motion is mapped in between each cycle..."

Since the image translator picked up from the Starliner (in FULL CIRCLE) stops working at the end of the story (as

they return to N-space), but normal service is resumed for THE KEEPER OF TRAKEN, we must assume that the Doctor has found a spare image translator somewhere aboard the TARDIS.

The Doctor again suggests that aliens *are* permitted to visit Gallifrey - he says that Adric will "love it" there.

It is more likely an error of editing than a comment on Time Lords' robust bone structure that one of the Gundan axes actually falls across the Doctor's back after the two Gundans "cut each other dead" in part two. A similar point can probably be made about the fact that Romana earths the Privateer's electrical power down a ladder she is standing on at the time (but earths it to where?).

When Romana meets Rorvik outside the TARDIS she gives him her full name.

K-9 gives the probability of error in his navigation calculations within the void as 87.7948% As Adric points out, this means he is "worse than useless."

Dwarf star alloy, we are told, is incredibly heavy. It says something for the Doctors strength and the quality of his coat that he is able to carry a set of dwarf star alloy manacles around in his pocket for three episodes without apparent inconvenience.

Continuity of a more conventional television/film kind is used in an interesting way when at the end of part one (and reprise in part two) the Doctor stands up the goblet on the banqueting table which he will himself fill with wine then deliberately knock over at the end of part three (reprised in part four).

Less clever in this department is the incredible self-repairing Gundan. Its head in pieces as the Doctor dismantles it in one scene, it has manages to pull itself together enough the wield an axe and escape through a mirror only minutes later.

The forthcoming *Doctor Who - The New Adventures* novel *Blood Harvest* (by Terrance Dicks) is a sequel to WARRIORS' GATE in that it features Romana after she has left the Doctor.

The main character of Steve Gallagher's radio play and subsequent novel *The Last Rose of Summer* is called Mitchell. In his revised version of the novel, *Dying of Paradise*, Gallagher (writing as *Stephen Couper* for contractual reasons) changed the character's name to Rorvik (except on a couple of occasions where his sticky labels fell off and the typesetters failed to re-correct it).

Gallagher's 124-page novelisation (fitting into WH Allen's brief of c55,000 words) of WARRIORS' GATE is interesting in that it has no chapter breaks, includes lots of new material (at the expense of much that was in the programme), and was published under the pseudonym of John Lydecker (*Lydecker* being another character from Gallagher's radio world).

Gallagher told Andy Lane: "I didn't think there was any positive need for chapter divisions. If the publishers had insisted for the sake of the format then I'd have used them, but they liked the way that it ran." (See *The Man in the Control Seat* starting on page 6 for Steve Gallagher's other comments on the novelisation.)

The badges worn by the Privateer crew all include photographs of the owner of the badge. Amongst Rorvik's crew, Mike Mungarvin plays a character referred to by Rorvik as "Kilroy." This explains the graffiti seen on a panel in the opening tracking shot on the Privateer - it says: "Kilroy was here."

Also in the opening sequence, we see that Also cheats at cards. He looks at the top card on the pack and swaps it for one of his own as Royce pays more attention to Sagan's countdown. The countdown itself is a little odd since at the end it is up to Packard to throw the launch lever. If he can be bothered. The rest of the crew are paid on a bonus system (depending on their cargo of Tharils), but Aldo and Royce are on an "all-in contract." According to Gallagher's novel, they came with the ship's lease.

Of the types of warp drive available (others include continuum warp and implicate theory), the Privateer uses supra-lightspeed, with dampers. In these models it is usually the tyroidal time dilators which give out first.

Amongst it food supplies the Privateer includes pickled onions (which Romana helps herself to with a pair of chop sticks). Rorvik also mentions custard ("I want a landing that wouldn't ripple the skin on a custard"); and Royce describes things at one point as being "neat as sardines." While trying to revive the Tharils in part four, Sagan munches on what looks like a chocolate bar, and Aldo and Royce make an excuse to leave and partake of drinks in mugs - possible coffee.

The Tharils aboard the Privateer are in some form of suspended animation. Apparently bright light is bad for them in this condition. They can be revived with the apparatus to hand, but to revive a Tharil safely requires "full apparatus" which is not carried aboard the Privateer.

The Privateer does carry a portable mass detector however (which Romana describes as "handy" under the circumstances), and an MZ - last used during the Tharil hunt on Shapia.

The Gateway is the point where N-space meets E-space. It is described variously as the "zero-point;" "No space; no time" and "caught between the time lines." Romana describes their predicament as being caught in the "theoretical medium between the striations of the continuum." When he shimmers while passing a statue in the monochrome castle-world, the Doctor says (in a dubbed line) that he "must be crossing the striations of the time lines."

Behind the Gateway door, we see blackness.

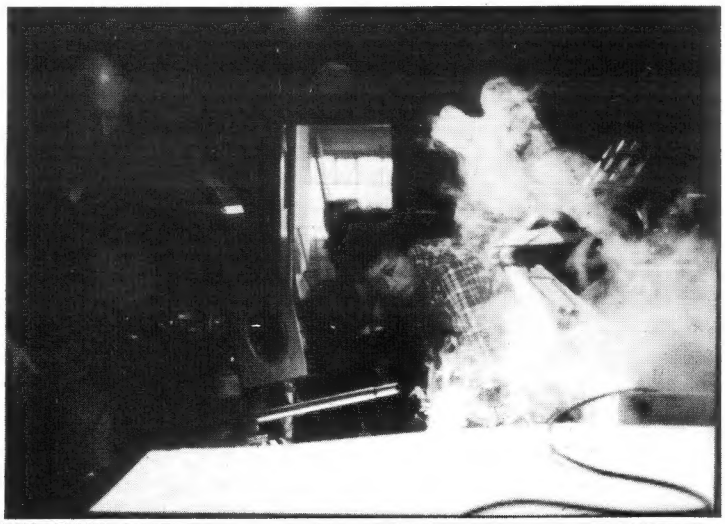
Biroc is described in the script (and in dialogue) as a "leonine mesomorph." Inside the Banqueting Hall are statues of upright lions.

In his novelisation, Gallagher says of the Tharils: "From an infinite range of possible futures, they could select one and visualize it in detail as if it had already happened. Sometimes in moments of extreme trance, their bodies would shimmer and glow, dancingbetween thsoe futures and only loosely anchored in the present. It took intense concentration to bring a Tharil back into phase with the moment. Or chains. The heaviest chains would do the job just as efficiently.' This ability to see possible futures is exploited as a means of navigation, in that they visualize a possible future destination and feed in the co-ordinates, thus making the possibility a reality.

Amongst the food at the banquet is fruit (in bowls on the table) and what appears to be lobster. Wine is also served - by human slaves ("They're only people," explains Biroc). "The Universe is our garden," Biroc tells the Doctor by way of explanation for the Tharils' culinary prowess.

While Rorvik and his men express surprise at the Doctor's sudden reappearance in their version of the Banqueting Hall, one has to consider them lucky that none of the crew was actually sitting in the Doctor's chair at the time.

Perhaps as it is her last episode in the series, Lalla Ward is treated to the challenging line: "The backblast backlash will bounce back and destroy everything." I·V



Eugene Carr (film cameraman), Paul Joyce (crouched in centre), and Simon Taylor (effects assistant) prepare to shoot model scenes

WARRIORS' GATE

Series 18, Story 5
Serial 113, code 5S
Episodes 548-551

(NOTE: ***IN•VISION*** includes SHADA in its numbering scheme)

CAST:
Rorvik - Clifford Rose (1-4)
Packard - Kenneth Cope (1-4)
Sagan - Vincent Pickering (1-4)
Aldo - Freddie Earlle (1-4)
Royce - Harry Waters (1-4)
Doctor Who - Tom Baker (1-4)
Romana - Lalla Ward (1-4)
Adric - Matthew Waterhouse (1-4)
Lane - David Kincaid (1-4)
Voice of K9 - John Leeson (1-4)
Biroc - David Weston (1,3-4)
Gundan - Robert Vowles (1-2)
Lazlo - Jeremy Gittins (2-4)

Small & non-speaking
Kilroy (crewman) - Mike Mungarvan (1-4)
Crewman - Robin McPherson (2-4)
Tharils - Joe Santo, Andy Hart, James Muir, Michael Gordon-Browne (1-4), Carl Bohun (1-2), Laurie Goode (3-4)
Gundans - Derek Schafer (1 (and reprise in 2)), Pat Gorman (2-3 (and reprise in 4), Carl More, George Gordon, Terry Sartain (2), Brian Moorehead, Maurice Connor, John Blackman, Chris Michelle, Tony Pryor (3 (and reprise in 4))
Female Tharil - Erika Spotswood (3)
Serving girl - Marianne Lawrence (3 (and reprise in 4))
Extras - Stephen Frost, Mark Arden (4) (possibly playing Tharils)

CREW
Title Music by Ron Grainer
Realised by Peter Howell, BBC Radiophonic Workshop
Incidental Music: Peter Howell
Special Sound: Dick Mills
Production Assistant: Graeme Harper
Assistant Floor Manager: Val McCrimmon
Director's Assistant: Joyce Stansfeld
Floor Assistants: Laura Gilbert, Kate Marshall
Lighting: John Dixon
Technical Manager: John Dean
Sound: Alan Fogg
Grams Operator: Gerry Borrows
Vision Mixers: Jim Stephens (1-2 (s2)), Paul del Bravo (3-4 (s1))
Electronic Effects: Robin Lobb
Video-tape Editor: Rod Waldron
Senior Cameraman: Alec Wheal
Crew: 11
Show Working Supervisors: Chick Hetherington (s1), Harry Randall (s2)
Costume Designer: June Hudson
Costume Assistant: Sarah Leigh
Make-up Artist: Pauline Cox
Make-up Assistants: Lisa Pickering, Heather Squires, Jan Lee, Caroline Gibbs, Penny Fergusson, Lesley Holmes, Wendy Holmes, Helen Johnson
Visual Effects Designer: Mat Irvine
Visual Effects Assistants: Simon Tayler, Steve Lucas, Bryony Keating
Visual Effects Cameraman: Eugene Carr
K9 Operator: Nigel Brackley
Properties Buyer: Gill Meredith
Design Assistant: Roger Harris
Designer: Graeme Story
Copyright (K9): Bob Baker & Dave Martin
Production Secretary: Jane Judge
Production Unit Manager: Angela Smith
Executive Producer: Barry Letts
Script Editor: Christopher H. Bidmead
Producer: John Nathan-Turner
Director: Paul Joyce

Transmission
Part 1: 3rd January 1981, 5:20pm, BBC1 (17.20.36, 22'54")
Part 2: 10th January 1981, 5:10pm, BBC1 (17.09.42, 23'47")
Part 3: 17th January 1981, 5:10pm, BBC1 (17.11.11, 22'15")
Part 4: 24th January 1981, 5:10pm, BBC1 (17.09.51, 24'53")

Audience, Position, Appreciation
Part 1: 7.1m., 88th, 59%
Part 2: 6.7m., 93rd, n/a
Part 3: 8.3m., 59th, n/a
Part 4: 7.8m., 69th, 59%
(No audience appreciation figures are available)

Recording
Studio 1: 17th, 18th, 19th September 1980, TC3
Studio 2: 2nd, 3rd, 4th October 1980, TC1

Visual Effects Film
Part 1: *35mm:* Wire TARDIS revolving; Spinning coin (Total 0'47")
Part 2: *35mm:* Privateer exterior (0'05"); Gateway (1'04")
Part 3: *35mm:* Privateer, Gateway and TARDIS in void (0'24")
Part 4: *35mm:* Gateway in void (0'03"); Privateer in void - sideways view (0'02"); Privateer with lights on (0'13"); Privateer turning round (0'07"); Privateer landing by TARDIS (0'07"); Privateer by TARDIS (0'03"); TARDIS glowing and dematerialises (0'08"); Gateway exploding (0'16"); Privateer shell (0'12"); *16mm:* Gateway exploding (0'26")

Music
Part 1:
Opening titles: (0'35"); *Closing titles:* (1'12"); *Incidental Music cues (Peter Howell):* 30" 20" 22" 27" 51" 2'04" 30" 1'05" 1'06"
Time Winds Theme (Dick Mills): 06" 37" 58" 06" 05" 11" 27"
Part 2:
Opening titles: (0'35"); *Closing titles:* (1'12");

Incidental Music cues (Peter Howell): 1'04" 55" 23" 1'11" 22" 48" 37" 40" 1'08" 15" 30" 55" 2'05"
Time Winds Theme (Dick Mills): 1'40" 1'19" 1'43" 10" 20" 17" 05"
Part 3:
Opening titles: (0'35"); *Closing titles:* (1'12"); *Incidental Music cues (Peter Howell):* 1'34" 34" 1'04" 30" 16" 16" 15" 34" 41" 05" 28" 12" 24"
Featured Music cues (Peter Howell): 15" 12" 09" 10" 29" 10" 30"
Time Winds Theme (Dick Mills): 26" 2'24" 14" 49" 35" 1'27" 23" 1'44" 06" 27" 33" 35" 17"
Part 4:
Opening titles: (0'35"); *Closing titles:* (1'12"); *Incidental Music cues (Peter Howell):* 25" 30" 1'47" 20" 1'05" 1'45" 1'15" 1'42" 1'12" 11" 1'00" 2'15" 08"
Featured Music cues (Peter Howell): 45"
TARDIS dematerialisation (Brian Hodgson): 06"
Time Winds Theme (Dick Mills): 8'16" 04" 1'02" 06"

Project numbers
Part 1: 02340/9291
Part 2: 02340/9292
Part 3: 02340/9293
Part 4: 02340/9294

Programme numbers
Part 1: LDLC055S/72/X
Part 2: LDLC056L/72/X
Part 3: LDLC057F/73/X
Part 4: LDLC058A/73/X

Periodicals
Antonine Killer 1, Aug 1989 (Interview with Steve Gallagher; Tim Westmacott says it is unclear how K-9's memory wafers can be compatible with the Gundans', given that they are products of different technologies.)
Daily Express, 24 May 1980 (Report of Lalla Ward's departure)
DWM Autumn Special, Sept 1987 (Interview with June Hudson)
DWM 139, July 1988 (Interview with Steve Gallagher, in which - amongst other things - he denies any underlying religious message.)
DWM 185, April 1992 (*Change and Decay* - an evaluation of Bidmead's contribution to season 18 - and Castrovalva - by Philip MacDonald)
DWM 194, Dec 1992 (*Soundhouse* - Peter Howell on incidental music.)
DWM 195, Jan 1992 (*What the Papers Said* by Marcus Hearn covers Romana and K-9's departure.)
E=MC3 1, 1980 (Steve Gallagher interviewed by Andy Lane)
E=MC3 2, 1981 (Steve Gallagher interviewed by Andy Lane)
Ephemeral 2, Jan 1986 (David Lamb thinks the story was beyond the general public)
Eye of Horus 8, March 1985 (Justin Richards says Romana saves the Doctor from killing them by blindly following his impulses; but when Adric follows *his* impulses, he lands the Tardis in the void, "allowing Biroc tobecome a part of the future he has already seen".)
Fan Aid 1, March 1985 (Peter Anghelides says that although the story seems to abandon realism, it reasserts this by making the object of its quest a physical gateway.)
Fantasy Image 1, Oct 1984 (Andrew Evans finds the story too comples for its own good)
Five Hundred Eyes 3, Dec 1988 (Ian Levy says that despite the surface weirdness, it is actually astraightforward story with a clear moral message about oppression.)
Flight Through Eternity 2, June 1986 (David McCambridge sees the ending as optimistic rather than sad.)
The Highlander 3, June 1985 (Jim Campbell comments)
The Highlander 12, Oct 1987 (Brian Robb says that the visual style is appropriately 'esoteric' insofar as it concentrates on objects rather than people.)
In•Vision 14, March 1989 (Interview with Graeme Harper)
The Key 2, Feb 1989 (Thomas Stanway claims it should be impossible to obtain dwarf star material to make anulloy because of its density: the gravitational force would crush anyonetrying to collect it.)
Kinda 2, March 1984 (Daragh Carville compares the freeing of the Tharils with Moses freeing theIsraelites.)
Laserson Probe 8 & 9, March 1985 (Sue Bradley comments.)
Linx's Log 1, March 1985 (Martin Canning says there are no enemies as such: the story degals withthe Doctor's escape from E-Space rather than his defeat of anyone.)
Logic Gate 1, March 1985 (Roy Callaghan says the message is overstressed... He neglects to mention what the message is.)
New Whovical Express 2, Sept 1987 (Chris Clark comments)
Oracle 3/10, Aug 1981 (Peter Anghelides says Rorvik is going to pieces faced with the difficult situation of needing to retain command over an apathetic crew in order to save them all; in the event, he is unable to keep their respect.)
Rassilon 1, Nov 1983 (Michael Staed sees hope versus certainty as the story's main theme.)
Rassilon 2, Aug 1984 (Michael Stead says the coin-tossing depends on the non-determinism of quantum theory, asopposed to a Newtonian, deterministic universe, where the outcome would bepre-ordained as a consequence of all past history.)
Second Dimension 1/7, July 1988 (Mark Ward thinks the humour is forced.)
Skeleton Crew, Dec 1990 (Andy Lane on sources for the script)
The Space Museum 5, June 1981 (Tim Westmacott comments)
Spectrox 5, May 1987 (Martin Wood says that *Orphee* contains images of rubbergloves, which may explain why the Doctor's damaged hand is gloved, and theline, "Look in a mirror and you see death at work" which has been quoted in connection with the use of the mirrors as a means of time travel. Also suggests Lewis Carroll as an influence - mirrors, Cheshire cats, etc. He also comments on other references and influeneces...)
Star Begotten 2, April 1987 (Tim Munro comments)
Tardis, Oct 1987 (Neil Hunter comments)
Tardis, Oct 1988 (Interview qith Steve Gallagher)
The Tarriel Cell 9, March 1991 (Jason Wilson says the story deals with existentialism and the fragility of life.)
Telos 2, Dec 1983 (Andrew Lewis comments)
Timelines 6, Aug 1990 (Interview with Steve Gallagher)
Time Screen 11, May 1988 (Interview with Kenneth Cope)
Time Watcher Tom Baker Special, Sept 1984 (Comments from Mark Anderson)
TV Zone 14, Dec 1990 (Interview with June Hudson)
Whovian Times 9, Aug 1984 (Comment on Tharks/Tharils name-change)
Yetaxa 2, Oct 1985 (Nicholas Goodman comments.)
Zygon 2, Jan 1985 (John Nicholas comments)

Literature
Couper, Stephen - *Dying of Paradise* (Sphere, 1982)
Dicks, Terrance - *Blood Harvest* (Virgin, 1994)
Gallagher, Steve - *Chimera* (Sphere, 1982)
Gallagher, Steve - *Oktober* (New English Library, 1988)
Gallagher, Steve - *The Last Rose of Summer* (Corgi, 1978)
Gallagher, Steve - *Valley of Lights* (New English Library, 1987)
Howe, David; Stammers, Mark; Walker, Stephen James - *The Fourth Doctor Handbook* (Virgin, 1992)
Irvine, Mat - *Doctor Who Special Effects* (Beaver Books, 1986)
Lydecker, John - *Warriors' Gate* (Target, 1982)
Pohl, Frederick - *Gateway*
Priest, Christopher - *Indoctrinaire*
Priest, Christopher - *The Space Machine* (Faber & Faber, 1976)
Shelley, Mary - *Frankenstein* (1831)

Doctor Who
The Brain of Morbius
The Creature from the Pit
Destiny of the Daleks
Full Circle
The Horns of Nimon
Image of the Fendahl
Kinda
The Leisure Hive
Meglos
The Mind Robber
The Ribos Operation
Snakedance
State of Decay
The Three Doctors

Television & Radio
An Alternative to Suicide (BBC Radio 4)
The Babylon Run (Capital Radio)
Blake's Seven (BBC, 1978-1981)
Chimera (Channel 4, 1991)
The Hitch Hiker's Guide to the Galaxy (BBC, 1981)
Kesler (BBC, 1981)
The Last Rose of Summer (Picadilly radio, 1979)
Multi Coloured Swap Shop (BBC, 1976-1980)
Play for Today - Keep Smiling (BBC)
Randall and Hopkirk Deceased (ITC)
Secret Army (BBC, 1977-9)
Spaceships of the Mind (BBC)
That was the Week that was (BBC)
Tomorrow's World (BBC)

Theatre
Shakespeare, William - *Hamlet*
Stoppard, Tom - *Rosencrantz and Guildenstern are Dead*

Film
La Belle et la Bete (Cocteau, 1946)
Orphee (Cocteau, 1949)